DOCUMENT RESUME

ED 345 165 CG 024 232

AUTHOR Nebbe, Linda Lloyd
TITLE Nature as a Guide: Using Nature in Counseling, Therapy, and Education.
REPORT NO ISBN-0-932796-33-8
PUB DATE 91
NOTE 242p.
AVAILABLE FROM Educational Media Corporation, P.O. Box 21311, Minneapolis, MN 55421-0311 ($10.95).
PUB TYPE Books (010) -- Guides - General (050)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Animals; Class Activities; *Counseling; Counseling Techniques; Elementary Education; Elementary School Students; Horticulture; *Physical Environment; School Counseling

ABSTRACT

This book contains practical activities for teachers, counselors, and other helping professionals utilizing elements in nature. The premise for the utilization of nature therapy is that if people develop an awareness and reverence for life, they will also develop self-understanding and self-respect. The first four chapters provide a rationale for nature therapy. The therapeutic approaches of nature therapy are defined for instrumental, relationship, passive, cognitive, and spiritual therapies. The next three chapters explain the approaches to nature therapy, which is broken down into animal assisted, horticultural, and natural environment therapies. Each section contains the history, research, problems, evaluation, and resources for each therapy. The last five chapters form a handbook which contains ways to utilize nature therapy. Individual and group techniques are discussed, and examples are provided for experiences and activities in the area of nature therapy. The experiences are written as lesson plans, and are organized into animal, horticultural, and environmental activities. Guidelines are provided for bringing animals into the office or classroom. Federal and state laws are described, and issues are discussed concerning breeding the office or classroom pet, animals used in science projects, insect collections, white mice, hamsters and gerbils, rabbits, birds, cats, dogs, farm animals, and wild animals. A sample Humane Society project is included that can be conducted during the summer or after the school day during the school year. (LLL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED345165

Using Nature as a Guide: Nature in Counseling, Therapy, and Education

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN **OTHER THAN PAPER COPY** HAS BEEN GRANTED BY

Don Sorenson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

by Linda Lloyd Nebbe

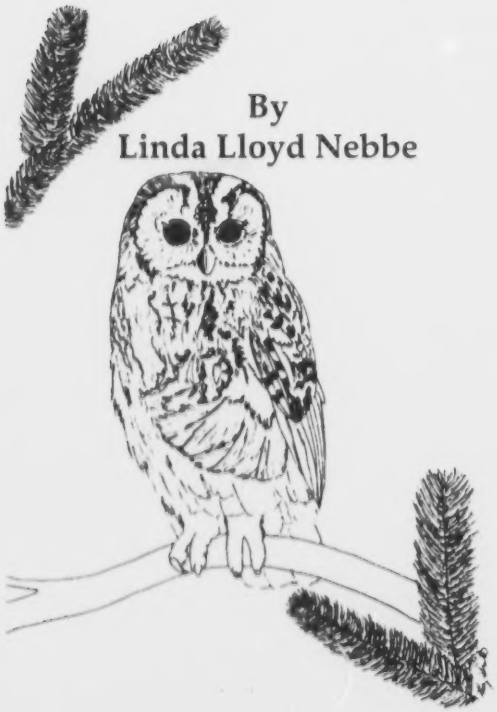
CG024232

BEST COPY AVAILABLE

Nature as a Guide:

Using Nature in Counseling, Therapy, and Education

By
Linda Lloyd Nebbe



Copyright 1991
Educational Media Corporation®

Library of Congress Catalog Card No. 90-086233

ISBN 0-932796-33-8

Printing (Last Digit)

10 9 8 7 6 5 4 3 2 1

No part of this book may be reproduced or used in any form without the expressed permission of the publisher in writing. Manufactured in the United States of America.

This book has been printed on recycled paper.

Publisher—

Educational Media® Corporation
Box 21311
Minneapolis, MN 55421-0311

Production editor—
Don L. Sorenson
Graphic Design—
Earl Sorenson
Artists—
Lucy Groth
Linda Weber

4

Dedication

I would like to dedicate this book:
to my parents,
to Sugar, Thunder, Ahoo, Fortune, and Peter,
to my family.

Acknowledgments

I would like to thank:

My family: Dennis, Carver, Nathan, Charity, Beth, David, Scott, and Kei; and my parents, Glen and Priscilla Lloyd, and parents in law, Carl and Frances Nebbe, for their encouragement and faith and patience.

Dr. Dominick Pellegreno, Department of Professional Studies in Education, Iowa State University, my major professor, mentor, and friend. Dr. George W. Beran, Department of Veterinary Medicine, Iowa State University, for his inspiration and challenge. Beth Granger for her friendship and continuing encouragement.

Very special friends and teachers: Sugar, Thunder, Fortune, Stevie, Alvis and Porky, Ahoo, Peter, Bandi, Olivia, Albert, Spirit, Bruce, and many many others.

Friends and colleagues from Dayton Oaks Camp, Iowa Wildlife Rehabilitators Association, P.E.T. P.A.L.S., The Black Hawk Humane Society, the Boone County Humane Society, and Cedar Falls Schools

Dr. Loren A. Will, Department of Veterinary Medicine, Iowa State University; Dr. Tina Ellenbogen, The Delta Society; Dr. Bernard Clausen, The College of Natural Sciences, The University of Northern Iowa; Clair Struck; Mary Beckman; Judith Harrington; Jeanne and Russell Phipps; Alvis and Erma Lester.

My first editor and typist, Linda Plueger, for her enthusiasm and encouragement. Others who have edited, typed, and encouraged.

My artists, Lucy Groth and Linda Weber.

Chapter 11 was compiled by Linda Nebbe with help from many people. The following people contributed: Tom Colvin, Executive Director, Black Hawk Humane Society; Dr. James Taylor, D.V.M., Cedar Falls, Iowa; Mike Bonser, Iowa Conservation Officer; and many administrators, teachers, and students in Cedar Falls, Iowa.

Those who have encouraged and inspired me through their work: Hope Ryden, Micheal W. Fox, Joseph Cornell, Conrad Lorenz, Sterling North, Helen Hoover, John Denver, Albert Schweitzer, and many many others.

Table of Contents

Part I: Rationale 1

Chapter 1 Once Upon a Time... 3
Chapter 2 Humans and Nature 9
Chapter 3 What is Nature Therapy? 19
Chapter 4 Nature Therapy—Is It for Everyone? 27

Part II: Approaches 31

Chapter 5 Animal Assisted Therapy 33
Chapter 6 Horticulture Therapy 55
Chapter 7 Natural Environment Therapy 65

Part III: A Handbook 79

Chapter 8 Ways to Work with an Individual and Nature Therapy 83
Chapter 9 Group Techniques 93
Chapter 10 Guidance and Teaching Activities 103
Chapter 11 Guidelines for an Animal in the Office or Classroom 197
Chapter 12 The Humane Society Project 215

References 223

Animal Activities

1. Adaptions 105
2. Going Wild 107
3. Create a Critter 109
4. The Nest 111
5. Observation 113
6. The Butterfly Tree 115
7. Critter Races 117
8. Observe an Ant Colony 120
9. Cricket Chirp Thermometer 122
10. Sound Exploration 123

Horticulture Activities

11. Make a Jack-O-Lantern 125
12. Naming 127
13. Uniqueness 129
14. Tree Rings 132
15. Forcing Bulbs 134
16. Forcing Branches 137
17. Dyeing Flowers 139
18. Grow a Weed 141
19. Plant and Grow Some Flowers or Plants 143
20. Garbage Can Gardening 145
21. Plants in the Office 147
22. Recycling Paper 148
23. Bottle Plants 150
24. Boat Races 152
25. A Natural Feast 154

Environment Activities

26. Pyramid of Life 159
27. Symbols 162
28. Clouds 164
29. Sensory Hike 166
30. Death 169
31. Perceptions 171
32. Scavenger Hunt 173
33. What Do You Need? 175
34. Gifts 177
35. Fighting Back 180
36. Changes 183
37. Hand Wave Voting 185
38. Cemetery Rubbings 189
39. Issues 191
40. Life's Questions 193
41. Contract of Commitment 195

I have always felt that all people, but especially the young, need to understand their relationship to the earth in order for them to really become well-adjusted, mature, and balanced individuals. One cannot begin to understand this relationship without knowing something about living plants and animals.

During the thirty years as a farm manager here I have seen many a boy who came trusting no one, including himself, and communicating with no one. Then he attached to a small calf that he feeds, and thus begins to look at things from a different perspective and to gain some self-confidence. Or seeds he plants in the vegetable garden produce something to be eaten and shared.

Generally the farm and gardens have been looked upon as places where boys could learn how to work. They desperately need this, probably more today than ever. Many young people simply don't know how to do much of anything. Nor have very many of them ever really been exposed to living things, whether they be plants or animals. Common sense has become a rare commodity. It is because of this that I feel an involvement with plants and animals may be one of youth's greatest needs today. For that matter, our society generally has lost touch with the living world and thus has alienated itself from the earth and brought to the fore what we are calling the environmental crisis. We have lost respect for life.

Gardening is good therapy for young and old. The earth has great healing power. It is the plant of course which makes it all possible. Simply realizing that we could not exist on this planet without the plant should be significant. Learning how and why this is true can occupy much of a lifetime and be only a beginning. Plants are miraculous creations. They hold so many secrets that they present a challenge and a hope for men of all ages, rich and poor, learned and the not so learned. Plants are indeed a source of great hope for our time and for the many people who are disturbed, frustrated, and concerned about the future. Knowing and understanding plants can give them hope and reassurance that with death there follows life and the great cycles of the seasons are part of even greater rhythms of the universe that are not dependent on mortal man's manipulation.

Robert Steffen, farm manager for thirty years at
Boy's Town, Nebraska

The following was a letter written to the President of the United States. Democrat Franklin Pierce, in 1855. Chief Seathl (Seattle), of the Suwarmish tribe of the State of Washington, is said to have written it, regarding the proposed purchase of the tribe's land.

The Great Chief in Washington sends word that he wishes to buy our land. The great Chief also sends us words of friendship and goodwill. This is kind of him, since we know that he has little need of our friendship in return. But we will consider your offer, for we know that if we do not do so, the white man may come with guns and take our land. What Chief Seathl says, the Great Chief in Washington can count on as truly as our white brothers can count on the return of the seasons. My words are like the stars—they do not set.

How can you buy or sell the sky —the warmth of the land? The idea is strange to us. Yet we do not own the freshness of the air or the sparkle of the water. How can you buy them from us? We will decide in our time. Every part of this earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every clearing and humming insect is holy in the memory of the experience of my people.

We know that the white man does not understand our ways. One portion of the land is the same to him as the next, for he is a stranger who comes in the night and takes from the land whatever he needs. The earth is not his brother, but his enemy, and when he has conquered it, he moves on. He leaves his fathers' graves behind and he does not care. He kidnaps the earth from his children. He does not care. His fathers' graves and his children's birthright are forgotten. His appetite will devour the earth and leave behind only a desert.

The sight of your cities pains the eyes of the redman. But perhaps it is because the redman is a savage and does not understand. There is no quiet place in the white man's cities. No place to hear the leaves of spring or the rustle of insect wings. But perhaps I am a savage and do not understand—the clatter only seems to insult the ears. And what is there to life if a man cannot hear the lovely cry of the whippoorwill or the arguments of the frogs around a pond at night?

The Indian prefers the soft sound of the wind darting over the face of the pond, and the smell of the wind itself cleansed by a mid-day rain, or scented with a pine. The air is precious to the redman. For all things share the same breath—the beasts, the trees, the man. The white man does not seem to notice the air he breathes. Like a man dying for many days, he is numb to the smell.

If I decide to accept, I will make one condition. The white man must treat the beasts of this land as his brothers. I am a savage and I do not understand any other way.

I have seen a thousand rotting buffaloes on the prairie, left by the white man who shot them from a passing train. I am a savage and I do not understand how the smoking iron horse can be more important that the buffalo that will kill only to stay alive.

What is man without the beasts? If all the beasts were gone, men would die from great loneliness of spirit, for whatever happens to the beasts also happens to the man. All things are connected. Whatever befalls the earth befalls the sons of the earth.

Introduction:

In retrospect, this book represents a lifelong quest. I grew up as an only child, my sibling was a dog who became very special to me as both a friend and a teacher. For fourteen years, she played with me, loved me, listened to me, and put up with me. During those obnoxious and difficult early teen years, I became increasingly aware of what a perfect friend she was. Then she became my teacher. I loved her, and because of her, I loved life.

My early adult years were filled with animals, gardening, and the environment. I longed for such experiences and enjoyed them. It was during the mid-70s while I was managing a camp and doing some environmental education programing, that I became aware of another dimension of nature that was far beyond the enjoyment. Many of the people who came to camp often had profound, life enhancing and life changing experiences while at the camp. I asked, "Why?" Then one day I attended a lecture on teaching environmental education. I was intrigued as the lecturer explained how vital environmental education was. I asked him, "But it seems like there is more—when people have these experiences it seems like more than just learning takes place. What do you think?" He answered, "Yes! This [environmental experience] is powerful and you need to know that." Someone else had noticed too! Thus, I began my formal search to understand what was happening and why.

Now, fifteen years later, I have been and still am absorbed in this adventure. As I work with children called "at risk", see people become more and more surrounded by technology, hear of people and countries continuing to arm themselves against each other, and observe the demise of our earth, I am more convinced than ever of the importance of "nature" as an integral part of each individual. Each individual's bond with nature is a foundation. If they develop an awareness and reverence for life, then they also have developed self understanding and self respect. As we understand ourselves better we are able to understand, respect, and accept others. This is the foundation for a peaceful and harmonic world.

The material in this book is referred to as *Nature Therapy*, but it is more than just a therapy. Nature is an element that is essential in development, health, life, self-concept, mental health, and well-being. Research, involving people of all ages, is beginning to support what I have referred to as nature therapy.

Although I am an elementary counselor and the focus of many of the activities in this book reflects my work with children, this book is for all people. I have used nature therapy with the elderly, adults, teens, and children. Written primarily for professional counselors, I believe this book may be helpful to people in a variety of fields such as teaching, camp counseling, and parenting.

The goal of this book is to share an idea and to provide resources for the reader who wants more information or activities. The book is also meant to be a dialogue with its readers. I am personally and professionally still searching. Please share with me your discussion, disagreement, and personal treasures.

Linda Nebbe

2027 S. Union Rd.

Waterloo, Iowa 50701

Everything an Indian does is in a circle, and that is because the Power of the World always works in circles, and everything tries to be round. In the old days when we were a strong and happy people, all our power came to us from the sacred hoop of the nation, and so long as the hoop was unbroken, the people flourished. The flowering tree was the living center of the hoop, and the circle of the four quarters nourished it. The east gave peace and light, the south gave warmth, the west gave rain, and the north with its cold and mighty wind gave strength and endurance. This knowledge came to us from the outer world with our religion. Everything the Power of the World does is done in a circle. The sky is round, and I have heard that the earth is round like a ball, and so are all the stars. The wind, in its greatest power, whirls Birds make their nests in circles, for theirs is the same religion as ours. The sun comes forth and goes down again in a circle. The moon does the same, and both are round. Even the seasons form a great circle in their changing, and always come back again to where they were The life of a person is a circle from childhood to childhood, and so it is in everything where power moves. Our teepees were round like the nests of birds, and these were always set in a circle, the nation's hoop, a nest of many nests, where the Great Spirit meant for us to hatch our children.

Black Elk
Black Elk Speaks

Part I

Rationale

Modern technology is so potent that it leads many people to illusions of immortality and omnipotence. The environment is so predictable, structured as it is by machines and convention that they view the flow of events under human control. The immersion in environments where one is subjected to such forces of nature as weather and the power of water produces respect for and understanding of the world that exists beyond human control.

This is the environment in which humans have struggled for millennia, the crucible that has influenced the forms of human technology, and there is excitement in glimpsing this world. Perhaps the excitement is that of exploring any historic place, of reliving in imagination any historic process. People gain a perspective on what it means to be alive and to be human in the twentieth century. The knowledge of ones mortality and limitations can lead to a sense of solidarity with the world, of oneness with all nature. This knowing ones place is a good feeling as many witness have testified.

John Miles

As soon as man does not take his existence for granted. . .thought begins. . .and he may realize it's true value.

Albert Schweitzer

Chapter 1
Once Upon a Time. . .

When I looked outside right into the depth of Nature and God, then I was happy, really happy.

Anne Frank

Once upon a time life was simple—not easy, just simple. Survival was our life. We lived close to the land. Our food and shelter came from what the land produced. If we did not understand our relationship to the land, we simply did not survive.

Whether a hunter, a gatherer, a wanderer, a fisherman, or a farmer, we knew from where our life came. Our bodies, like all living things, were tuned to the timeless rhythms of the universe. Without an understanding of natural forces, we created gods of the wind, the fire, and the other forces in our environment. For protection and survival, we strived to please and protect our "nature" gods.

As centuries passed, we improved our way of life. Life became a little easier and, we believed, a lot better. We began to observe, to discover, and to study; we began to understand the natural law and order in the universe. For many, the "gods" became one "God." Yet we retained our reverence and respect for the land and all livings things.

As our knowledge and understanding of our world grew, we developed astonishing ways to manipulate our environment, to make life even easier and better. "Progress!" For some, a God was no longer necessary. We could seemingly control our own destiny. Villages became towns; towns became cities; cities became metropolises. Believing we had total control, our technology soon imprisoned us in "plastic bubbles," artificial environments connected to each other by long, narrow ribbons of concrete.

As our children grew they learned about life from what they observed. Most of their observations were contrived life experiences on a screen, transmitted by flickering lights and carefully selected by someone else.

Becoming alienated from our earth, our roots, and our "God," we became unhappy. Emptiness led to a search for meaning, for the familiar, for understanding. To fill our emptiness, we created bigger and better "bubbles." We filled our minds with continuous stimulation. We made it faster and easier to travel from "bubble" to "bubble" and beyond. Easy episodes of exhilaration and self-satisfaction lasted only temporarily. And the emptiness grew. The unhappiness grew; the alienation, now a part of us, grew. Where were we going?

How true is this scenario? Is it just one cynical, gloomy view of the state of our existence today? Wendel Berry, in *The Unsettling of America* (1978), talked of this alienation in his description of the small family farm of the past, with each family member's necessary roles for survival.

Mother was the bearer of children and the keeper of the home. Yes, she could work in the field along side any man, but her strength and her body dictated her primary role. Father managed the livestock, tilled the fields, and butchered the meat. Even though he could help mother in an emergency, father's role was primarily the provider. Mother was the fixer. Both were necessary and important.

Children helped, too, with their chores. They attended to the garden, gathered the produce, milked the cow, and collected the hens' eggs. They helped father and mother. All were necessary and important to the family's survival.

Contrast Berry's family with most families today. Mother's job at home has been made easy, convenient, and, to some, seemingly nonessential. Her daily work is outside the home. So is father's. Mother and father only share the house as a place to sleep. In many cases, there is no father; in some, there is no mother. Most leisure activities occur away from the home. Shopping has replaced hunting, gathering, and growing. Children have some "chores," like making their beds, taking out the garbage, and vacuuming the floor. They are told their chores are important, but are they? Perhaps children do chores only so mother and father can have more time to go bowling, have a drink, or just relax.

Family members buy "things" to entertain themselves during their leisure time. Pressure is everywhere. What to wear? What to say? How to look? What to do? Children spend more time with their peers, a babysitter, and television than they do with their parents. Families move frequently. Families split up regularly. Sometimes new mothers and fathers are forced upon children. Relationships lack security. Who can one trust?

Most of today's families, said Berry, are no longer producers but, instead are consumers. Through our lifestyle, we have lost our elemental tie with the land.

Beyond questions of our lifestyles today lie the matter of life and death. Life, as an endless cycle of living and dying, is not understood or appreciated. Dead is the squashed squirrel on the highway, or grandpa buried in a cemetery, one hundred miles away. His annual summer visit will be replaced with a trip to Disneyland. Death is viewed as disquieting, worrisome, scary, even unhealthy. It is best to stay away from it. Then what of life? Does it come from the back seat of a car? From wild parties, a bedroom, a hospital, a laboratory? Life is perceived as expensive, and sometimes a bother.

Technological societies have even "modernized" childbearing. Joseph Chilton Pearce (1980) told at length of the disastrous effects of modern birth techniques. Serious disabilities can result from drugs the mother uses during pregnancy or from drugs administered during labor and delivery. Other disabilities may occur from cutting the umbilical cord too soon, thus depriving the infant of oxygen at a critical time, or from handling the newborn in ways that are traumatizing, including separating the child from the mother immediately after birth. Additionally, in the 1950s, over 90% of our newborns were laid in a crib and fed from a bottle, depriving each of critical contact and the most natural nourishment (Montagu, 1986). Although these practices still reflect the majority, the figures are not quite so high today. Climbing higher, however, in the United States today are the number of infants turned over to day care soon after birth (Magid, 1988). Studies with humans and animals show that deprivation of critical contact and developmental need fulfillment at an early age can leave serious and long term behavioral scars (Pearce, 1980; Montagu, 1986; Magid, 1988; Greenberg, 1977).

Modern technology has given us a false feeling of power over our own destiny and, at the same time, left many feeling confused and empty. Many children today are more alienated from their worlds than their parents are. To them, life outside the city is not a reality, except on television. Forests and woods are dark and dangerous places fraught with risk and peril. Many children growing up on farms also live in air-conditioned homes and travel to school in buses or air-conditioned cars. Farmers today till their fields in huge, air-conditioned tractors and feed their crops all sorts of artificial chemicals. Most people today consider the land something to use and abuse; it is only there for us to somehow obtain a profit.

For many, hunting used to be a means of survival. Today, most hunters have turned hunting into a bloody, commercial game. Those who used to depend on hunting for survival understood and cared for the animals. They took only what they needed; they protected and nurtured the rest. Today, expensive, high-powered guns, aimed from airplanes, snowmobiles, and pickups routinely snuff out the lives of thousands of animals, only to be mounted, displayed, or discarded. For most, killing is detached from the reality of the act. The animals' lives have no intrinsic value. The children who accompany hunters learn about power and killing—the killing of nature. But, do the children learn about nature itself? (National Audubon Special, 1989; Poachers, 1989)

A study involving aggressive, incarcerated criminals revealed a connection between aggressive criminals and an interest in hunting and war magazines (Baron, 1987). Could this tell us that the indiscriminate killing of nature is people's cry for help?

What is the interrelationship between people and nature? How do we determine the essence of that relationship? Historically, nature has been studied without noting the presence of humans. Although references to this relationship turn up in some works, most scholars have not considered humans and nature as a unified whole, nor have they explored the importance of that relationship.

Our relationship with nature can be illustrated with an activity. To visualize this phenomenon, create a pyramid of life. The pyramid can be built with blocks, or people can be used to build a gymnastic pyramid (Cornell, 1979). Give individuals cards to represent what part of life on earth they are. Label the blocks. The table top or the group represents the sun and water, constants

necessary for life to exist at all. (See the figure below.) Then build the pyramid. The bottom level of the pyramid is plants; the next, animals that eat plants; the next, animals that eat animals. On top of the pyramid are humans. When one or more of the lower levels are eliminated, the levels of the pyramid above are affected. Humans are affected when any of the lower levels are changed. But when only the top level, humans, is eliminated, nothing happens to the rest of the pyramid. Humans are not entirely dependent on the natural environment, yet nature is *not* dependent on us. Life in our world could survive just as well without the human race! Yet we have the potential to destroy all natural life on this planet.

Humans

Animals that eat animals

Animals that eat plants

Plants

Earth, Sun, and Water

Unfortunately, it is not difficult to relate the pyramid of life to today's world. The rain forests of the world are rapidly being destroyed; they are essential in purifying the air we breathe. Scientists are now alerting the world to the impending "greenhouse effect," a direct consequence of the destruction of the rain forests. The consequences of acid rain, chlorofluorocarbons, farm and industrial chemicals, and other chemical wastes are all around us.

On a smaller scale, a biologist told this story of what actually happened in Borneo:

> *Some years ago the World Health Organization launched a mosquito control program in Borneo and sprayed large quantities of DDT, which had proved to be a very effective means in controlling the mosquito. But, shortly thereafter, the roofs of the natives' houses began to fall because they were being eaten by caterpillars, which because of their particular habits, had not absorbed very much of the DDT themselves. A certain predatory wasp, however, which had been keeping the caterpillars under control, had been killed off in large numbers by the DDT. But the story does not end there, because they brought the spraying indoors to control houseflies. Up to that time, the control of houseflies was largely the job of the little lizard, the gecko, that inhabits houses. Well, the geckos continued their job of eating flies, now heavily dosed with DDT, and the geckos began to die. Then the geckos were eaten by house cats. The poor house cats at the end of this food chain had concentrated this material and they began to die. And they died in such numbers that rats began to invade the houses and consume the food. But more important, the rats were potential plague carriers. This situation became so alarming that they finally resorted to parachuting fresh cats into Borneo to try to restore the balance of populations that the people, trigger-happy with the spray guns, had destroyed (Dodson Grey, 1979, p. 72).*

The tally of destruction caused by farm chemicals, industrial pollutants, toxic waste, oil spills and insecticides has only begun to be discovered. Much damage will not be evident for years, and then it will be too late to do anything about it.

In 1982 our nation was referred to as "a nation at risk." Are we also a "world at risk?"

> *When I was four years old, as I well remember, I was brought from Boston to this my native town, through these very woods, to this field, to this pond. It is one of the oldest scenes stamped on my memory. And now tonight my flute has walked the echoes over that very water. The pines still stand here older than I; or, if some have fallen, I have cooked my supper with their stumps, and new growth is rising all around, preparing another aspect for new infant eyes.*
>
> Henry David Thoreau

Chapter 2

Humans and Nature

We are related to all nature, animate, and inanimate. To be serene and successful we must be at one with the universe.

Henry David Thoreau

Bookshelves abound with information about nature and information about humans, but, according to Ian McHarg (1969), "There is still only a small shelf of books that deal with man's relation to his environment as a whole." Although writers through the ages have referred to our relationship with nature, apparently very few have tried to document it. Earliest efforts at documentation occurred over 5000 years ago in ancient Sumerian texts. These were followed both in the arts and in the literature of the ancient Greeks, where people looked to nature as a great healer. Hippocrates was the first great thinker to record his thoughts about this relationship. *Aires, Waters, and Places* publicly recognized that our lives are bound up with the forces of nature. Hippocrates believed that those forces must be understood and used as an ally rather than as an adversary (McHarg, 1969).

The French philosopher Rousseau wrote of our loss of "natural freedom." He believed that the only way to survive the "unnaturalness of urban life" was for wilderness visits. He claimed that our strength was lost in the "foul air of the crowded cities." It could only find replenishment by coming in contact with the natural environment where we could experience temporary "freedom" (Welton, 1978).

Tales of St. Benedict and St. Francis told us of their uncommon concern for living things and the natural environment. Few know about Hildegard of Bingen, a noted twelfth-century musician, poet, dramatist, physicist, doctor, prophet, and painter whose subject dealt with the connection of humans and the environment. (Uhlein, 1983). The classic contemporaries, Emerson, Thoreau, and Longfellow wrote extensively of our relationship to the environment. Dr. Albert Schweitzer, the great humanitarian, published much concerning "reverence for life." George Washington Carver's life and work bore witness to his closeness to the natural world. Philosopher Alfred North Whitehead also wrote about our relationship to nature. At the turn of the century, Anna Botsford Comstock, in her classic work *Handbook of Nature Study* (1911), talked about teaching "reverence for life" and declared "for love of nature counts much for sanity in later life."

Studies of many cultures and religions consistently pointed out that people have both a spiritual and a practical tie with their total environment. Native American lore is filled with references to this bond.

Today, many individuals and activist organizations demonstrate their concern by fighting to preserve our natural environment, thereby proclaiming their conviction that humans and nature are inseparable. However vocal, the activists still encounter apathy and skepticism at every turn. "Who cares about the snail darter?" they are asked.

The significance of our bond with the total environment is obvious to many. Several contemporary writers, however, have tried to illustrate this concept by asserting that our mental health may itself be directly tied to this relationship.

Architect Ian McHarg is a pioneer in dealing with this issue. In *Design with Nature*, he developed the theme of our direct relationship with our natural environment. He said, "The planet Earth has been the one home for all of its process and all of its myriad inhabitants since the beginning of time, from hydrogen to men. Only the bathing sunlight changes. Our phenomenal world contains our origins, our history, our milieu; it is our home." He drew our life line biologically from the beginning of creation, and documented the pulse and rhythms we still possess today, which are part of our heritage. He further pointed out how the environment, or lack or it, influences us. In a study of an eastern metropolitan area,

he noted that the more crowded and dense the city became, the greater the instances of poor physical and mental health, the lack of smiling faces, and seemingly less happiness. Conversely, at the edge of the city, the opposite was true. He believed an important factor in these conclusions was the lack of contact with natural surroundings in the inner city. McHarg continued:

> *Clearly the problem of man and nature is not one of providing in a decorative background for the human play, or even ameliorating the grim city; it is the necessity of sustaining nature as a source of life, milieu, teacher, sanctum, challenge, and most of all, of rediscovering nature's colliery of the unknown in the self, the source of meaning (McHarg, 1969).*

In his architectural work, McHarg also included plant life and small plant-filled courtyards in the buildings he designed. This, he believed, created working and living environments that were more pleasant and healthy for people. It also demonstrated his belief that in our modern world, we must bring "nature" to people.

Another writer, Rene Dubos, traced the relationship of humans and nature to our earliest existence. Dubos felt that this "striving for unity may have deep biological roots in the very first forms of life." In *A God Within*, he told about modern hybrid cell experiments that he believed had proven the same protoplasmic origin of living things. He discussed the half mouse/half human and half mouse/half kangaroo cells that fused together and lived. Dubos observed, "Even today there remains throughout the living world an affinity capable of resembling the elements of different forms of life which had been differentiated eons ago" (Dubos, 1972).

Harvard psychologist L.J. Henderson, in his book *The Fitness of the Environment*, said the earth was ready, or "fit," for us when we appeared here. Fifty years before Henderson talked of the earth's "fitness," poet and humanist Walt Whitman referred to the "primal sanities" of nature which were the qualities of the earth that made for a rich human life. Whitman's "primal sanities" and Henderson's "fitness" referred to the conditions under which we evolved and to which our biological constitution is still adapted. According to Dubos, civilization today is in conflict with the "primal sanities" and the earth's "fitness." Dubos concluded that participation with the environment to which we are adapted is essential for our sanity (Dubos, 1972).

In another study reported by Dubos, Joseph Kruthch pointed out that human beings are not likely to fare well in areas lacking visible forms of life. Thus, quality life in barren lands, like the desert or in purely "plastic" or human made environments, may be difficult or impossible.

Our early natural instincts may affect us today in other ways. Our reaction to crowding and to strangers may be an example. We are not basically aggressive or killers, but the abnormal technological society we live in may lead to tension and aggression. Thus, the high rate of crime may be directly related to changes in our living environment. Other animal species crowded into small spaces will eliminate some of their numbers to make room. Do humans tend to do likewise (Dubos, 1972)?

Wendell Berry, farmer and author, said it a bit differently. He believed that today's modern problems are related to an alienation from the land. Such problems as crime, the high divorce rate, mental illness, and certain physical problems have their basis in the non-productive life style fostered by the technological society. As a cure for our wasting *bodies*, we adorn them with fancy clothes and makeup, and fill them with drugs. As a cure for our wasting *minds*, we buy gadgets and seek thrills from little shocks of greed, scandal, and violence. We believe we are protected and in control of the life dramas of which we are inherently a part (Berry, 1978).

As further evidence of the alienation, Dubos pointed to weak efforts on our part to reach out to our biological past. He contended that camping, backyard barbecues, fires in our fireplaces, pets, plants, and hunting all bring flashes of the unity for which we are searching. Beatnik life, awkward as it may have been, was an effort to capture those "ancient and lasting values industrial civilization is in the process of destroying."

It is difficult to understand these urges when those lessons taught by technology blight our vision (Dubos, 1972). We spend an average of six to eight hours a day in darkened rooms, our eyes fixed on a box of flashing lights, experiencing life in a biased, one dimensional fashion. Jerry Mander claimed that living in front of television not only robs us of essential experiences, but it is the root of many current social problems. Television replaces natural experiences with very poor artificial experiences. He cited television watching as a cause of learning disabilities, mental illness, crime, and violence. "As humans have moved into totally artificial envi-

ronments, our direct contact with and knowledge of the planet has been snapped. Disconnected, like astronauts floating in space, we cannot know up from down or truth from fiction. Conditions are appropriate for the implantation of arbitrary realities. Television is one recent example of this, a serious one, since it greatly accelerates the problem." Children are especially affected. As children grow, they copy the role models they see in their environment. On the average, children spend eight hours a day in front of television compared to six hours at school and only twelve minutes of quality interactive time with their parents. The body watching television is mentally and physically similar to a hypnotized one. Children are more profoundly affected than adults (Mander, 1978).

Problems brought about by technology are not only mental. The physical person also suffers. Crowding effects are only one example. Environmental pollution is another poison that may cause permanent damage. Chemical poisons have poured into our world at an alarming rate since World War II. Their potential damage can only be estimated. These physical problems have strong and lasting effects on our physical and mental health.

Louis Pasteur warned against the health hazards that might result from environmental changes. To illustrate, he put a bird into a closed glass dome. Over a period of time the bird became listless as it used up the life-giving gasses within the dome. An additional bird was added to the dome. The second bird died immediately. Pasteur concluded that although life can adapt to gradual changes, such changes can be the most dangerous because they can potentially cause drastic effects on our physical and mental health without our awareness (Dubos, 1972).

Other abnormalities result when an organism is removed from the environment to which it has adapted. Organisms develop pathology when placed into milieu to which they have not adapted. This is true of animals found in zoos and persons in institutions. Also this is the case of the civilized person in an artificial environment. Michael Fox, director of the Institute for the Study of Animal Problems of the Humane Society of the United States, believed that modern people are pathological misfits and that "man outside of nature cannot be fully human." He did not believe that we must return to living in the "wild," but we must become aware of our plight and develop a new attitude toward all life. With such an awareness, our lifestyle will change significantly (Fox, 1980). Dubos agreed, "This does not require a return to cave life—but it demands

the kind of social and technological reforms that will give man the opportunity to search for the fundamental satisfactions found only in nature, in human relationships, and in self-discovery" (Dubos, 1972).

In 1949, conservationist Aldo Leopold published his revolutionary work, *A Sand County Almanac*. The book was a collection of his observations and experiences "here and there." Included was a chapter called "Land Ethic" in which Leopold traced the development of human culture. The first step in the civilization process, he said, was the development of our relationship to each other as individuals. Secondly, we began to relate to society. Finally, and presently developing, is our relationship to our whole world. "The land ethic," said Leopold, "simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively, the land." He continued, "A land ethic changes the role of Homo Sapiens from conqueror and of the land-community to plain member and citizen of it... and it implies respect for his fellow-members and also respect for the community as such" (Leopold, 1949).

Observers involved in environmental education, school camping, and wilderness camping have noted profound positive effects on participants, including increased self-esteem, self-confidence, self-concept, and pride. Increased levels of responsibility and development of physical skills were also noted. Although research considers the total camping or wilderness experience and refers directly to a nature factor, those involved with these pursuits believe that the natural environment itself is a major contributing factor to the "healing" and positive behavior changes which seem to occur.

Efforts to document the value or influence of the natural environment itself are frustrating. Though many people believe that the natural environment is of great influence and value, and the main reason that environmental experiences are "healing," little concrete evidence has been found to support that belief. Maslow's theory of "peak experiences may be one way to explain the benefit of natural experiences (Swan, 1977). A "peak experience" is a spiritual or enlightening experience. Maslow claimed the ability for an individual to have "peak experiences" is a sign of strong mental health. Also, Maslow claimed having "peak experiences" contributed to mental health. Many such "peak experiences" are reported

to take place in the wilderness environment. Due to people's state of consciousness in this nonthreatening environment, the possibility of having a "peak experience" is enhanced. In this way "nature" experiences clearly contribute to a person's positive mental health.

Wilderness experiences may be valuable for another reason. Wilhelm Reich, the pioneer of the Western body contact therapies (Swan, 1977), claimed that "mental health" was directly correlated with people's capacity to absorb and discharge life energy, which he called "Orgone energy." Reich felt people's in ability to do this resulted in "psychological dysfunction." Further work by others has confirmed Reich's observations. Kirlian photography is a device for measuring energy fields which surround everything in our environment. The energy field is static around non-living things. Living objects, however, have their own distinct energy field which changes upon the condition of the object. This energy may be exchanged in some form or other between living objects and therefore natural areas are "reservoirs of life nourishing energy." When we have experience in natural places, our life energy is renewed (Swan, 1977).

Natural experiences are also a critical and fundamental part of every persons development. Child development theories refer to stages of development during which certain tasks or events must be successfully accomplished for an individual to continue with healthy mental development. Erik Erikson, child-psychoanalyst, outlined eight stages of development.[1] The third stage he referred to as "initiative vs. guilt." Children are usually involved in this stage during their fourth to sixth years. It is a time of exploring and investigating their world which includes the natural world. Children are involved with play outside, making mud-pies, and interacting with people and animals in that environment (Maier, 1965).

Now I see the secret of making the best persons: It is to grow in the open air and to eat and sleep with the earth.

Walt Whitman

Although based on Erikson's developmental theory, Joseph Chilton Pearce changed terminology as he described the matrixes people move through during their lifetimes.[2] Pearce's third matrix is the earth matrix. He described this necessary step in development as a time when children are discovering and interacting with the earth and the natural world (Pearce, 1980).

Erikson's fifth state of development, "identity vs. identity diffusion," also includes people's ability to see their connection to the world. This stage generally occurs during the teen years. Erikson referred to the elemental parts of our identity as "basic" identity. Erikson said that "basic identity includes who one is in body (species, sex) and what one's biological inheritance is (genealogically and "nature"ly). Once individuals have resolved these elements of "basic identity," they are ready to build on it with the other identity factors. However, a basic identity is difficult to formulate unless individuals are first aware of their choices. Those growing up in the "plastic world" of technology have little chance to become aware of their natural heritage. Learning about it is not enough. Such awareness must come from experiencing the earth. Knowing who we are in relation to the world we live in is an important part of healthy development.

That wind, those trees, that water we heard, those contemplative plants and flowers outside, the valleys, and the great mountaintops with their fall of snow reflecting sun, moon, and stars underneath. All seemed to him as a boy an expression of the permanent essence of life more true and wonderful than any in men and their societies. It was to them that he turned when the world for the moment defeated his questioning self.

About Carl Jung
by Laurens Van der Post Jung and
the Story of Our Time

Whatever theories one might have about the connections between the human mental state and our natural environment, something does exist! That something might be biological, a "primal instincts" conflict, "Orgone energy," "peak experiences," or a Force too big for us to comprehend. Perhaps it should remain a mystery, something we cannot classify, measure, and produce. If it were understood, our highly industrial society would try to capture it, copy it, package it, and sell it!

Within the last decade, three distinct kinds of therapy have evolved which share the theory that people are part of nature. For us to be physically and mentally healthy, we must be aware of our relationship with our natural heritage. These three therapies—horticulture therapy, animal assisted therapy, and natural environment therapy—all try to bring the natural environment close to the client or patient in different ways. The remainder of this book will explain these three types of therapy.

Believe one who knows, you will find something greater in woods than in books. Trees and stones will teach you that which you can never learn from masters.

St. Bernard De Clairvoux

[1]*Erikson's eight stages of identity include 1. trust vs. distrust (birth to one); 2. autonomy vs. shame-doubt (two yr. to four yr.); 3. initiative vs. guilt (4 yr. to 6 yr.);; 4. industry vs. inferiority (6 yr. to 12 yr.); 5. identity vs. identity diffusion (young teen years); 6. intimacy vs. isolation (young adult); 7. generativity vs. self-absorption (maturity); 8. integrity vs. despair (old age). Each stage of development has a central problem or task for the individual to resolve before proceeding to the next stage. These stages occur at similar points in most people's development, but can occur at other times, though they are usually more difficult to resolve.*

[2]*Joseph Chilton Pearce lists the matrixes as: womb, mother, earth, physical body, others, mind-brain, and mind-brain with other mind-brains.*

(Later on that night) the only sound was the familiar one of Skeezer's nails clicking on the floor as she made her rounds. At Bentley's door she hesitated. Moving slowly past an obstruction toward his bed, she laid her head on the pillow near his and kept it there....

"Skeezer," he whispered, "Skeezer." He put his arms around her neck, "You old bitch, you." Skeezer nuzzled him, then turned and went her way....

Miss Williams stood in the doorway of Bentley's room. His steady breathing assured her that he was sleeping so she put on the light. Bentley had placed two chairs just inside his room and strung a rope across them to make a barrier. From the rope hung a notice, crudely lettered on a piece of cardboard, "Everybody except Skeezer, KEEP OUT. I hate you!"

Bentley had returned to the ward for a second time. (He was not very well liked by the other children on the ward because of his aggressiveness.)

He greeted the other children by a rush of "dirty" words and the news that he was in "The Dirty Kids Club." The kids thought this was great "news" and ran down the hall to spread the news.

Bentley was alone. Skeezer moved over from her place of observation against the wall and pushed herself close to him. Bentley leaned hard against her. She dragged her tongue across his hand. Sure that no one was looking, he put his arm around her and talked to her, telling her the obscenities of which he was so proud. Skeezer did not care what was said, for the sound of the saying was tender and with his words Bentley proclaimed his love for her. Her tail wagged, her eyes searched the face that was close to hers.

"Don't ever go away, Skeezer, don't ever go away."

Glancing about him to be sure no one could see what he was doing, Bentley put his other arm around her and hugged her. The embrace was too tight for comfort, but Skeezer endured it. "That's the way I used to hug my mom, my real mom, but she went away and left me. And when I hugged my other mom like that she tells me to get away."

Yates, 1973

Chapter 3

What is Nature Therapy?

Participation in nature's endless whims provides the vital contact with the cosmic forces which is essential for sanity.

Rene Dubos

Webster's New World Dictionary (1988) defined therapy as the "treatment of disease." The term originated from the Greek root "to attend," "to care for," or "to serve," but it has since been associated with illness, mental or physical handicaps, or mental illness. "Psycho" therapy refers to treating diseases of the mind, that is, the "treatment of mental illness, especially of nervous disease and maladjustments, as by suggestion, psychoanalysis, or reeducation."

In the introduction to *Theories of Counseling and Psychotherapy,* Cecil Patterson (1980, pp. 2-3) defined psychotherapy and counseling as having these definitions in common:

> *A process involving a special kind of relationship between a person who asks for help with a psychological problem and a person trained to provide that help.... To help individuals thwart overcoming obstacles to their personal growth, wherever these may be encountered, and toward*

achieving optimum development of their personal resources (Patterson, 1980). (By the Committee on Definition, Division of Counseling Psychology of the American Psychological Association)

Patterson also considered instruction as "counseling" when it included emphasis on attitudes, feelings, and emotions.

Therapy can be very simple. It may be a brief walk alone, reading a good book, seeing a movie, playing a game of golf or solitaire, or playing with a pet. These activities help people relax. We think of them as "therapeutic." They relieve stress, make us feel better, and allow us to refocus our energies.

On the other hand, therapy can be a complicated process. Individuals may be guided to discover hidden parts of themselves. It can be a process in which persons delve into their minds to search for meaning, to probe for understanding, and to seek control. Special guidance from a psychologist, psychotherapist, or a counselor is needed for this process.

Or there is physical therapy to help our bodies work better, respond better, and feel better! Whether physical therapy corrects a dysfunction caused by injury or illness, or exercises our bodies to stay fit, we are engaging in therapy.

These definitions also encompass all the aspects of nature therapy presented in this book. Nature, itself, seems to possess a therapeutic or healing effect upon us. Contact with nature in some form seems to be necessary for strong mental health. Nature therapy, too, can refer to a collection of experiences or tools used by a person, in a helping relationship with another person, as participants seek personal identity and "optimum development of their personal resources," or in the "mental treatment of an illness" or "maladjustment." Thus, whether the patient or client experiences treatment in the natural environment or whether the natural environment is brought to the patient or client, both are avenues of "nature therapy."

Nature therapists use two different philosophies. Some believe the most important element is the individual as therapist. Whatever element of nature the therapist uses is an aid or tool to conduct the therapy. On the other hand, some nature therapists believe nature itself is the therapist and is directly responsible for the healing. The individual conducting the therapy is an overseer and guide.

Psychologist Boris Levinson, considered the founder of animal assisted therapy, used his dog, Jingles, in his practice with children. Levinson (1969) warned therapists planning to work with animals that they could not have big egos, and had to be willing to take a second seat to their animals. He believed that the animal truly became the therapist. When his clients began to get well, Levinson said, the relationship would be transferred from the animal to the professional therapist.

The role of the therapist depends on several circumstances. Certain clients respond to the animal or natural experience, while other clients respond to the human therapist. The therapist, time, place, and animal may all be factors. Both nature-directed and therapist-directed therapy can exist, in fact, even at the same time. In each case, the animal or natural element becomes the key to make the interpersonal relationship and the therapeutic work possible.

The table on the following page defines therapeutic approaches of nature therapy. It is an adaptation and extension of a table originally presented by Dr. James Serpell (1983). Though each category is listed separately, they generally overlap. For example, a service dog provides instrumental therapy for a handicapped person. The dog also shares an important personal relationship and provides entertainment and relaxation.

Until we come to grips with the mysterious presence in us of the gifts and heritage of the good earth and rain and sun and stars we will not understand all that we are and all that we are becoming.

Elizabeth Dodson Gray

Instrumental Therapy

Instrumental therapy encourages people to move more and to do things they would not normally do without the therapeutic media. Examples of instrumental therapy include: a service dog for a blind or handicapped person, potting and caring for plants, a mentally or physically handicapped person riding horseback, a nature walk, or an ambulatory person petting an animal. Because of the increased mobility and control, people experience more freedom, improve their confidence, and increase their self-esteem.

	Animal Facilitated Therapy	Horticulture Therapy	Natural Environment Therapy
Instrumental Therapy	Animal becomes an extension of the person.	Person undertakes additional activities.	Person is involved in activities that use motor skills and senses.
	Person has some control of the animal.	Person has control while working with the plants.	Person experiences increased mobility.
	Person has increased mobility, coordination, and skill.		
Relationship Therapy	Persons perceives a warm, personal relationship with the animal.	Person feels that what is being done is worthwhile.	Person feels an identification or a connection with a place.
	There is interpersonal interaction between the person and animal.	Person feels needed.	
	Person feels needed.		
	Person feels loved.		
Passive Therapy	Person becomes absorbed in the animal's activities.	Person enjoys, with pleasure, the beauty of plants, flowers, trees, gardens, and so forth.	Person enjoys the environmental surroundings.
	Person is entertained.		Person relaxes.
	Person relaxes.	Person relaxes.	
Cognitive Therapy	Information promotes understanding, control of life, and respect for life and environment.	Information promotes understanding, control of life, and respect for life and environment.	Information promotes understanding, control of life, and respect for life and environment.
	Information enables self awareness and empathy.	Information enables self awareness and empathy.	Information enables self awareness and empathy.
	Information releases memories and fantasies.	Information releases memories and fantasies.	Information releases memories and fantasies.
Spiritual	Experience brings life renewing energy, sense of oneness with creation, and a sense of peace and well-being.	Experience brings life renewing energy, sense of oneness with creation, and a sense of peace and well-being.	Experience brings life renewing energy, sense of oneness with creation, and a sense of peace and well-being.

Relationship Therapy

When people experience an interpersonal interaction with the therapeutic media, they are involved with relationship therapy. People may experience a sensation of being needed and loved. This provides a sense of worth and a sense of responsibility, thus improving self-confidence and self-esteem. A person's pet usually is the therapy mode, but therapy can exist with a squirrel or bird, another's pet, or even with a plant or a "place." Sometimes people want so badly to have such relationships that they will perceive them with the smallest bit of encouragement. The memory of the relationship can last long after the animal has left or the experience is over. This happens easily with institutionalized individuals or children.

Passive or Entertainment Therapy

Passive or entertainment therapy is what the name suggests: watch and enjoy. Studies by Beck and Katcher (1983) showed that watching puppies play or observing an animal is stimulating, fun, and relaxing. Watching an aquarium full of fish has been documented to be nearly as relaxing as meditation (Beck, 1983).

Cognitive Therapy

Cognitive therapy occurs in several ways. As people learn more about an animal, a plant, or the environment, they feel more in control and thus better about themselves. Children who have fears about a dog, for example, will be more confident when they learn how to approach, pet, and treat the dog. Their fears come from a lack of information. When people feel more in control of their lives, there is higher self-esteem and self-respect. Consequently, they show more respect and responsibility for their environment.

Another form of cognitive therapy is to teach empathy by first asking for an individual to empathize with an animal. It seems to be easier for children and some adults to empathize with an animal than with people. Empathy with animals seems to be transferable to empathy for human beings. This leads to greater understanding of oneself and others and to more altruistic attitudes toward others.

Knowledge about plant care can also increase confidence and self-esteem. The feeling of accomplishment and worth that comes from helping a plant grow gives purpose for being.

The first peace, which is the most important, is that which comes within the souls of people when they realize their relationship, their oneness, with the universe and all its powers, and when they realize that at the center of the universe dwells the Great Spirit, and that this center is really everywhere, it is within each of us.

Black Elk

Spiritual Therapy

For some individuals, natural experiences provide a life-renewing energy—a tie with the oneness of all of creation. The sight and feel of a puppy, the smell of dirt or a forest, or the wag of a dog's tail can be therapeutic when such an experience touches an individual with the wonder and miracle of life.

Man in every generation found reaffirmation of his unity with nature and with the elemental forces of nature which may be symbolized by God.

Boris Levinson

Within these broad categories of nature therapy lie a wide range of potential experiences for individuals.

Acceptance: Animals, plants, or places accept people without qualification. They do not care how people look or smell or what they say. Acceptance is unconditional, forgiving, and uncomplicated by psychological defenses and games.

Entertainment: If nothing else, even the most dedicated couch potato is entertained watching a cute puppy or seeing a beautiful garden or flower.

Socialization: Cusack and Smith's studies (1984) have shown that when puppies and kittens came to visit a care facility, there are more smiles, laughter, and inter-resident communication than during other therapy or entertainment times. Staff also reported it is easier to talk to residents during and after pet visits. Family mem-

bers often came during the pet visits. Many reported it was an especially comfortable and pleasant time for them to visit. Working together in a garden or caring for a plant also gives an individual "conversation." Often those sharing these experiences feel a strong bond with one another.

Increased Mobility: Every area of nature therapy provides opportunities for increased mobility. Reaching to pet a puppy or smell a flower, throwing a ball, or digging in a pot all increase mobility. In some cases, the animal makes mobility possible, such as in the case of service dogs.

Mental stimulation: Mental stimulation occurs because of increasing communication with other people, recalling memories, planning and setting goals, learning new ideas—all provided by the natural stimulation.

Physical contact: Much has been written about the importance of touch for living things. People lacking this important physical contact can actually die from the lack of touch (Berne, 1964). Often for people, touch from another person is unacceptable, but the warm, furry touch of a dog or cat is fine! Touch is also expressive. Working with plants and digging in dirt provides opportunities for expression and release of anger and stress.

Physiological benefits: Many individuals experience decreased heart rate and decreased blood pressure when animals are present. Tests have shown that the decrease in heart rate and blood pressure can be dramatic (Beck & Katcher, 1983).

Fulfillment of psychological needs: We all have common, basic needs: love, respect, usefulness, acceptance, trust, and worth. All psychological theories agree that people have basic needs, and these needs must be met to experience well-being. By experiencing and caring for living things in our environment, these needs can be met.

Something more : Something more may be defined as spiritual fulfillment or a sense of oneness with life and nature. Some persons describe their relationship with an animal or working with their garden as part of their life-sustaining energy, part of their communication and relationship with a creator. Albert Schweitzer, George W. Carver, and J. Allen Boone all expressed this "something more" in their work and writing.

Here is calm so deep, grasses cease waving... wonderful how completely everything in wild nature fits into us, as if truly part and parent of us. The sun shines not on us, but in us. The rivers flow not past, but through us, thrilling, tingling, vibrating every fiber and cell of the substance of our bodies, making them glide and sing.

John Muir

Come forth into the light of things. Let Nature be your teacher.

William Wordsworth

Chapter 4

Nature Therapy—Is It for Everyone?

It is my conviction that there is within the human individual a sense, whether at a conscious or unconscious level, of relatedness to his nonhuman environment, that this relatedness is one of the transcendentally important facts of human living, that—as with other very important circumstances in human existence—it is a source of ambivalent feelings to him, and that finally, if he tries to ignore its importance to himself, he does so at peril to his psychological well being.

H.F. Searles

Is this kind of therapy for everyone? If the theory that contact with nature is important for well-being is legitimate, the answer is yes. On the other hand, if the goal is a therapy or activity that everyone would enjoy, the answer is no. Not everyone likes being with animals, working with plants, or even being outdoors. Sometimes, however, the benefits derived are not because the person enjoys the experience, but because of the experience itself.

When Beck and Katcher (1983) measured the blood pressure and pulse rate of persons with a pet, they discovered that both blood pressure and pulse rate decreased when most of their subjects were with an animal. They also found some people who did not seem to respond to animals in the usual, relaxing way. These were people whose life work had been with animals—farmers, veterinarians, or livestock workers. To these people, the presence of animals often had a reverse effect, that of stressing the individual! Many of them, however, still had an interest in the animals.

Although children seem to have a universally positive reaction to animals, an adult's response is related to the person's early life experiences with and teachings about animals (Beck & Katcher, 1983). Often, however, a child needs guidance and education to know how to interact with an animal. All a child knows is what has been modeled by others in the child's environment. This may not always be appropriate behavior. Showing a child appropriate ways to interact with the animal is critical to providing successful experiences. Children seem to respond to new teaching models and new information. That is why early, positive, environmental experiences can make have important influence in the development of a strong earth-identity.

In most situations, nature therapy is gentle and natural. Steve Van Metre, in his book *Acclimatization* (1972), cautioned his readers to keep natural experience comfortable and enjoyable. If persons are uncomfortable, their subsequent desire to repeat such experiences will be negative!

Nature therapy, however, can also use undesirable situations. A wilderness camping experience cannot always control for "good" weather. In fact, the survival factor is enhanced if the camper copes successfully with the most undesirable conditions.

The only restriction to the use of nature therapy is the professional therapists skills. Before natural experiences are implemented as therapy, the therapist must be qualified, competent, confident, and thoroughly acquainted with the nature therapy chosen, whether it be knowledge of a specific animal's behavior or whitewater canoeing.

The rest of this book will refer to a variety of modes of nature therapy, their definition, and presentation. Even for clients who are allergic to all animals and plants, do not like to get their hands dirty, or are agoraphobic, the creative therapist can help them discover a suitable mode of nature therapy.

To be human is to be circled in the cycles of nature, rooted in the processes that nurture us in life....

Elizabeth Dodson Gray

The Lakota was a true naturalist—a lover of nature. He loved the earth and all things of the earth, the attachment growing with age. The old people came literally to love the soil and they sat or reclined on the ground with a feeling of being close to a mothering power. It was good for the skin to touch the earth and the old people liked to remove their moccasins and walk with bare feet on the sacred earth. Their tepees were built upon the earth and their altars were made of earth. The birds that flew in the air came to rest upon the earth and it was the final abiding place of all things that lived and grew. The soil was soothing, strengthening, cleansing and healing.... The old Lakota was wise. He knew that man's heart away from nature becomes hard; he knew that lack of respect for growing, living things soon led to lack of respect for humans, too. So he kept his youth close to its softening influence.

Chief Luther Standing Bear

Part One—Suggested Readings

Berry, W. (1978). *The unsettling of America*. New York: Avon.

Dubos, R. (1972). *A God within*. New York: Charles Scribner's Sons.

Fox, M. (1980). *One earth, one mind*. New York: Conward, McCann 7 Geoghegan.

Gray, E. (1979). *Why the green nigger*. Wellesley, MA: Roundtable Press.

Leopold, A. (1949). *Sand county almanac*. New York: Oxford University Press.

Magid, K. and McKelvey, C. (1988). *High risk: Children without a conscience*. Lakewood, CO: CDR Distributors.

Mander, J. (1979). *Four arguments for the elimination of television*. New York: Quill.

Montagu, A. (1986). *Touching: The human significance of the skin*, third edition. New York: Harper & Row.

Pearce, J.C. (1980). *Magical child*. New York: Bantam Books.

"Tell children a story and they listen with their whole beings. Lead children to touch and understand a grasshopper, a rock, a flower, a ray of sunlight, and you begin to establish connections between the children and their surroundings. Have them look at a tree—feel it, smell it, taste its sap, study its many parts and how they work. Help them to understand how it is part of a forest community of plants, animals, rocks, soil and water. Keep the children at the center of their learning encounters. . .Build on these experiences with activities that help them to care for, and take care of, the Earth and other people—to develop a conservation ethic."

Caduto (1988)

Beth was a teenage girl from a large metropolitan area. She was the youngest sibling in her family by eight years and still living at home with her divorced mother. Beth had led a sheltered life and suffered from a very low self-concept and lack of confidence.

While at camp she was part of a group that "got to know a leaf." Each participant took a leaf from a single tree. All of the individuals studied and "got to know" their leafs, then introduced them briefly to the group. Upon finishing, all members put their leaves into the center of the group. The leader messed up the leaves and added a few more. Then participants were to find "their" leaf.

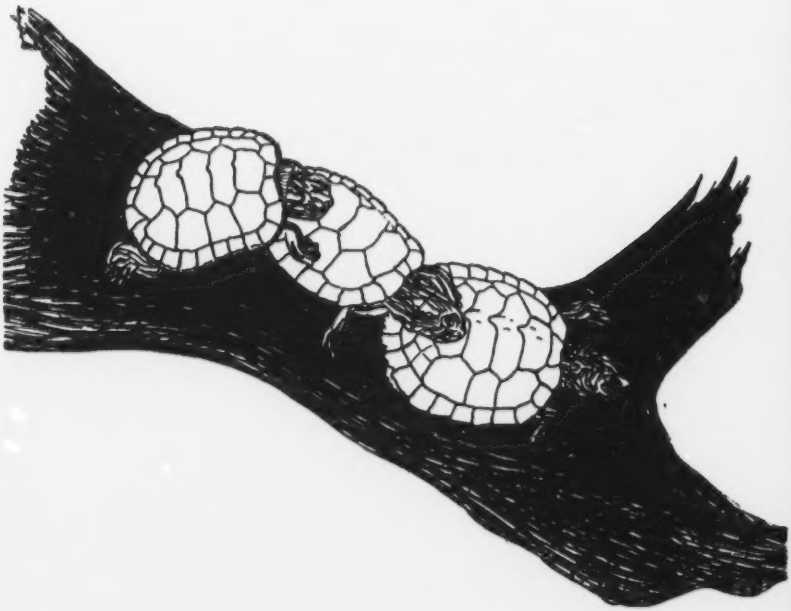
After participants recovered their own leaf, the leader pointed out the uniqueness of each leaf: each did special jobs that were important; each had individual characteristics; each contributed to "life". The leader likened the leaf to every living thing—blades of grass, worms, birds, and human beings.

Unknown to the leader at this time, Beth kept her leaf as a symbol of her own special uniqueness.

Nebbe, 1982

Part II

Approaches



At one nursing home, a resident made it quite clear that she did not like dogs or cats and that she clearly believed they should not be placed in her facility. Instead of staying clear of this woman, the resident social worker requested that the pet therapy volunteer try to visit her every week.

Each visit the scene was repeated. The volunteer and the dog would head down to the lady's room where she seemed to be waiting by her door. As she saw the volunteer approaching, she would begin to shout, telling the volunteer to "get that animal out of here." The volunteer would get close enough so the woman could hear her say, "I'm sorry to bother you. We will leave now." The volunteer and the dog would turn and head back down the hall.

The social worker believed this strong woman was in a situation (the nursing home) over which she had very little control. This one event each week gave her the chance to state her opinion strongly and get results. The social worker's suspicions were validated when she discovered that the woman frequently declined invitations to go out with her daughter on days when pet visits were planned, an outing she otherwise looked forward to and enjoyed.

Nebbe, 1987

Richard, a nine-year-old, was very fearful of others hurting him. He was "reached" through my fish. As he sat in my waiting room, he alternately opened and closed his mouth in imitation of the fish. I took some fish food and urged Richard to help me feed them. He reluctantly did so, and seemed concerned and perplexed about the competition among the fish for food. I casually remarked that the big fish did not hurt the little ones, but that they all lived together in the aquarium in a friendly competition. The next few therapy sessions were devoted to observing fish and discussing them. Richard's fear was somewhat assuaged by what he learned about the fish, and he later wanted me to show him how to start an aquarium of his own. My treatment of Richard was greatly facilitated by his interest in the aquarium and the lessons it taught him.

Levinson, 1972

Chapter 5

Animal Assisted Therapy

Children show no trace of arrogance which urges adult civilized men to draw a hard and fast line between their own nature and that of all other animals. Children have no scruples over allowing animals to rank as their full equals. Uninhibited as they are in the avowal of their bodily needs, they no doubt feel themselves more akin to animals than to their elders, who may well be a puzzle to them.

Sigmund Freud
(Sussman, 1985)

Definition

Animal therapy or animal assisted therapy offers contact with an animal to provide the opportunity for therapeutic interaction. A therapist may use an animal as a tool in the therapy process. Many animal assisted therapy methods exist. Aquariums in waiting rooms can be calming. Dogs or cats offer opportunities for touch, care, and relationships. Horses offer opportunities for physical control and relationships. Livestock need care and offer relationships.

History

Early relationships between humans and animals were probably of the hunter and the hunted. Although surely a fine line marks the change, the first historical records of the domestication of animals dates back 12,000 years. With domestication, a variety of human-animal relationships developed: animals as servants, animals as gods, animals as tools, animals as crops, animals as healers, and animals as companions.

Boris Levinson said it this way, "There seems to have been a universal need and affection for pets which took different forms in different cultures and ages. Nevertheless, man in every generation found reaffirmation of his unity with nature and with the elemental forces of nature" (Levinson, 1969).

Could it be that the pet actually domesticated the human being? As we modified our environment, we brought "nature" home with us via the domestic animal. New lifestyles became possible. We were then able to grow our own food rather than hunt. Animals helped in the field planting and harvesting. Animals provided us with protection.

Most of the professional recognition of the importance and value of the human-animal bond has occurred within the last half century. Previous to that time, such musings belonged only to poets and philosophers.

One of the early treatment centers recognizing the human-animal bond was "The York Retreat" in England. As early as the middle of the eighteenth century, treatment included caring for pets. The York Retreat was noted for its revolutionary approaches to treatment of the mentally ill.

In 1867, Bethel, a care center in Bielefield, West Germany, included animals as part of treatment. Bethel was originally founded to care for epileptics, but its treatment base has expanded and today includes over 5,000 patients. Animals are still included as an important part of the living environment at Bethel.

At the Pawling Army Air Force Convalescent Hospital in Pawling, New York, animals were included as a therapeutic aid as early as 1942.

World War II contributed to the field of animal assisted therapy in another way. By the end of the war, many wonderfully trained military dogs had no further war-time function. These animals' futures were solved when many of the animals were retrained as guide dogs to serve blind individuals. Since that time, the "service dog" has expanded to include many animals that aid people with a variety of disabilities.

In the 1960s, Boris Levinson, a child psychologist, began writing professionally about his work with his canine "co-therapist," Jingles. At first, his peers responded with amusement, but through a survey of other professionals that Levinson conducted, he discovered

many professionals included animals therapeutically in their work. After writing two exceptional books, Levinson was not only taken quite seriously, but was heralded as the founder of the animal assisted therapy movement.

Sam and Elizabeth O'Leary Corson were also early pioneers in animal assisted therapy. In the early 1970s, while the Corsons were doing research at Ohio State University, some of the adolescents housed nearby at the State Hospital asked if they might play with the Corsons' research dogs. Observation of these human-animal interactions led to formal research which confirmed the value of the animal therapy.

In the latter part of the 1970s, the late Michael McCollough, a practicing psychiatrist, founded the Delta Society with a group of like-minded people. First a part of the California based Latham Foundation, Delta became an independent non-profit corporation in 1981. Today, Delta is based in Renton, Washington. It provides an international professional organization for individuals working with the human-animal bond. The Delta symbol, a triangle, exemplifies the three facets of our relationship to nature—animals, plants, and the natural environment. Delta provides services to promote research, encourage education, provide service, and hold annual conferences. They also publish a journal in cooperation with Tufts University, publish a newsletter, and provide a data base of research and materials in the human-nature bond field.

Frequent media coverage during recent years has attested to the rapid growth and acceptance of the animal assisted therapy field. Television specials, books, and many articles have appeared frequently since 1980. The recognition of the importance of the human-animal bond has also been reflected in the United States and other countries through federal housing laws that allow people who are living in federal housing to keep pets and by legislation designed to protect the rights of animals.

Research

The founding of the Delta Society also marked the beginnings of serious research in animal assisted therapy.

Some of the early research on the human-animal relationship focused on the elderly. Pet ownership has been correlated with a positive attitude toward self and others and an enhanced social life (Cusack & Smith, 1984). Heart disease patients who owned pets were discovered to live longer than those who did not (Beck &

Katcher, 1983). In a classic study, the physiological effects of pets were noted as a person's measured blood pressure significantly decreased when the person interacted with a pet (Cusack & Smith, 1984).

As the importance of pets in the lives of the elderly has come to light, the relationship between children and animals has also drawn attention from both practitioners and researchers. One study reported that a pet is an important part of the child's environment. Levin and Bohn reported that children in families with pets were less likely to suck their thumbs. They believed this indicated a more emotionally secure environment. Levin and Bohn also observed that a pet helped to teach children important skills, including patience and temper control (Levine, 1986). Children in families with pets showed feelings of greater competency and higher self-esteem (Levine, 1986) as well as greater empathy for other human beings (Bryant, 1986; Malcarne, 1986). This was true, however, only in families where the animal is perceived as a family member (Soares, 1986).

A poll of Fortune 500 chief executive officers determined that 94 percent of the respondents had a dog or cat as a child. About 75 percent of those respondents still had a pet. This figure compared with 53 percent of U.S. households that owned a pet. These executives reportedly felt their pet was significant to them during their development. The executives said they learned responsibility, empathy, sharing, and companionship from their pets. Many noted that the pet was someone with whom to talk (Bulliton, 1984).

Montagner reported that in cases of severely disabled or mentally handicapped children, animals were able to induce desirable behavior patterns not otherwise appearing (Montagner, 1986).

Displaced children and/or children in long-term foster care placements who were in therapeutic treatment where dogs were part of the treatment seemed to progress faster than children in therapeutic treatment without dogs. The dogs provided the children with a sense of constancy and, in some cases, control in an erratic, tumultuous, and unpredictable environment (Gonski, 1986).

In interviews with adolescent juvenile offenders entering a resident facility, the interviewer included her dog in ten of twenty interviews. In every case with the dog present, the interviewer found the young men responded with increased openness and less hostility than in the interviews without the dog present. Interviews

with the dog present logged 280 interviewee responses as compared to 40 interviewee responses in the interviews without the animals present (Gonski, Peacock, & Ruckert, 1986).

Jodi McAdams (1988) had graduate student observers rate counseling sessions involving a sighted counselor and a client, a non-sighted counselor and a client, a sighted counselor with a dog and a client, and a non-sighted counselor with a dog and a client. A script was followed so the variables were the presence of the dog and the sight of the counselor. Thomas, Cash, and Salzbach rating scales used included *The Confidence for Counseling Outcomes Expectancy Scale*, the *Continuation of Counseling Scale*, and the *Counselor Traits Scale*. *Ratings* for the sighted counselor with a dog were significantly higher than the other ratings. The sighted counselor without a dog was second highest. The non-sighted counselor with a dog received the third highest ratings. The lowest rating was that of the non-sighted counselor.

Institutionalized adolescents given a rabbit to care for over a six-week period demonstrated less aggressive behavior than adolescents in another activity program or the control group (Davis, 1986).

Researchers have discovered a link between childhood animal abuse and human violence (Sussman, 1985). A study entitled *Childhood Cruelty Toward Animals Among Criminals and Noncriminals* reported that childhood animal cruelty occurred to a significantly greater degree in the population of aggressive criminals. It is hypothesized that as children, these people learned from "models" in their environment to be abusive to animals. As they grew, the abuse transferred to people (Advocate, 1987). Evidence indicated that although no research to date supported it, this trend can be reversed through education and strong models while the people in question are still children (Sussman, 1985).

Davis observed that emotionally disturbed children became involved more readily with animals than people or tasks (Davis, 1986). Boris Levinson (1969) said that when the child (client) relationship begins to transfer from the animal to the therapist, the child is "getting well."

Another study by Davis (1986) indicated that children who stutter were more effectively motivated toward spontaneous speech when in therapy with a dog. Speech students in therapy with a dog showed significant improvement in areas of self-concept, advanced

language structure, and more appropriate and efficient use of speech.

The positive effects of an animal's presence with adults depends upon the adults' early experiences and feelings for animals, but animals appear almost universally to provide a beneficial and positive influence upon children (Beck & Katcher, 1983).*

How Animals are Used in Therapy

The ways animals are incorporated into therapeutic situations are varied. New ways and new methods continue to develop.

Animals are being used increasingly with geriatric patients in residential and treatment centers and with individuals with special needs. Programs vary from live-in animals to visiting animals provided by individuals or by the Humane Society. (State laws limit what can be done, though many are leaning toward modified use.)

Animals have also been and are being increasingly used with physically limited patients in both physical and mental therapy. Specific uses include cases of multiple-handicaps, including brain-damaged; perceptual impairment, blindness, polio, CP, deafness, leprosy and accident victims including veterans and paraplegics. Additionally people who are emotionally disturbed are being helped through private therapists and in family therapy which may include family pets. Children in institutions benefit from contact with animals and in some areas programs have been initiated for college students. Foster homes and orphanages are using programs that include animals to varying degrees. Animals have been introduced into rehabilitation centers, including alcohol and drug treatment centers; deterrent programs for juvenile delinquents; programs for mentally retarded individuals; and correctional institutions such as prisons and homes for the criminally insane (Arkow, 1982).

Animal assisted therapy is indicated for patients who are non-verbal, inhibited, autistic, withdrawn, obsessive-compulsive, and culturally disadvantaged. Animal assisted therapy is also a treatment for patients lacking self-esteem or exhibiting infantile helplessness and dependence, and for individuals in times of bereavement (Arkow, 1982). Children with ego center problems can also be treated with pet therapy (Levinson, 1969).

The list of possibilities is as long as a list of human needs. According to a variety of authors, animals can be included within the therapeutic process in many ways.

- A pet can provide fulfillment of the client's emotional needs (Wallin, 1978).
- The therapist may use an animal as an ice breaker (Wallin, 1978).
- An animal may greatly aid problem assessment (Levinson, 1969).
- An animal offers an opportunity for multi-dimensional communication. With an animal, the need for language is low. Patients often can communicate, or believe they are communicating, with an animal and do not feel threatened (Levinson, 1969).
- An animal can provide a non-threatening relationship and can easily establish trust (especially with those who have not learned to trust). This trust is projected onto the human therapist (Levinson, 1969).
- An animal can offer a safe and easy way for the client to participate in giving (Levinson, 1969).

- An animal provides a stimulus for other types of therapy, ie. walking the animal, playing with the animal, caring for the animal (Levinson, 1969).
- An animal helps interpret a clients's thoughts and feelings, especially children. Observations of the animal's behavior can often be transferred into a setting the client is striving to understand, ie. some children become interested in the dog's phallus. Why does the dog perpetually lick itself? Is the dog dirty? Does the dog like it? Are people that way too? A natural jumping off point is then provided for a realistic discussion of dog or human sex activities. Another example: Why does the dog fight with other dogs. This might help the child patient think in terms of sibling rivalry and jealousy (Levinson, 1962).
- A pet can help differentiate reality vs. fantasy. Though a child can play fantasy games with a pet, the pet is real, it has needs, and the child must recognize them (Wallin, 1978).
- A pet can provide motivation for learning and living (Levinson, 1969).
- A pet provides an excellent tool for sex education (Levinson, 1972).
- A pet allows for role playing opportunities (Levinson, 1969).
- A pet provides a way to set "natural limits" for the client (Levinson, 1969).
- A pet can be used as a guide or role model.
- A pet provides a stimulus for social interaction (Levinson, 1969).
- A pet may teach life function, roles, and responsibilities (Arkow, 1982).
- A pet may provide preparation for coping with death (Levinson, 1972).
- A pet may become a pseudo-sibling for a child (Levinson, 1969).
- A pet may provide hours of companionship, particularly for those who are lonely or restless (Levinson, 1961).
- A pet may offer an indication of progressive healing. Changes in the client's relationship to the pet generally coincide with the client's increasing ability to handle other problems (Levinson, 1969).

- A pet can provide someone to talk with who will listen (Ruckert, 1987).
- Pets can provide acceptance.
- Pets provide nurturing touch experiences.
- Pets, and common interests in pets, help individuals develop an interest in people (Levinson,1969).

However vital a pet may be in a therapy role, pets are not for everyone. A professional working with animal assisted therapy must be sensitive to the client. In some situations the client may not like animals, but the pet may still play an important role in therapy. For example, persons living in an institution have very little control over what happens in their lives. The opportunity to say, "I hate dogs. Get that dog out of here," may give those people something they can control. When the professional respects that wish, it helps

build trust with the client. Another example is the child with fears, especially if the child denies those fears. When they are acted out in the presence of the animal, the fears can no longer be denied.

Through associations formed around common interests in pets, humans develop an interest in each other, which may and often does lead toward the formation of friendships that finally generalize into a love of humanity.

Boris Levinson

Boris Levinson believed that through associations formed around common interests in pets, humans develop an interest in people. In his own practice he often saw the relationship between the pet, himself, and the patient change as healing occurred. As the patient used the pet less and less, the pet-client relationship transferred to a relationship between the human therapist and the client.

Various animals can be used for animal therapy. Dogs are probably the favorite; cats, second. These choices, though, are not always the most feasible. The individual situation of the client, therapist, and setting dictate what animals are practical. Perhaps a birdfeeder, an aquarium, or a bowl of fish may serve the situation. Levinson told of one instance where an emotionally disturbed patient at one institution became angry and destroyed everything within a particular room, except the tank of fish! Horseback riding therapy, called hippotherapy, is popular throughout the world (People, Animals, Environment, Winter, 1987).

In situations where animals cannot be present, substitutes in the form of stuffed animals and puppets, posters or pictures will create an "animal" atmosphere. Kidd and Kidd (1988) supported the hypothesis that young children showed similar initial responses to live pets and stuffed animals. As the age of the child increased, though, the responses to live pets became more intense and lasted longer compared to the short term initial response to the toy. Animal posters and animal toys and puppets also provide a catalyst for discussion, play, and expression.

A child's own pet may sometimes be the chosen animal for animal assisted therapy. This may be beneficial in many ways. Talking about the animal helps the child learn about the animal and

can be insightful for the therapist. The child can be taught and helped to train the animal while also working toward achievement of other objectives such as setting specific daily goals, developing empathy, enhancing self esteem, and establishing control.

Problems

Compared to the benefits, the problems of animal assisted therapy are insignificant, but they do exist. Therapists need to be aware of them and ready to deal with them if or when they occur.

Allergies are a common concern. Many people claim to have an allergy to animals. Often this is manifest only if they live with the animal or spend time in close proximity with the animal. Severe allergies are usually documented on health histories. Those persons often know how to take care of themselves. If possible, be aware in advance of persons with allergies, and work with them to find a safe way to deal with their situations.

Many persons express *fears* concerning animals. Before they enter your office, tell the client if an animal is present. If you are in a group with the animal, ask how many persons feel afraid of the animal. With forewarning and fear recognition, fearful persons will have the opportunity to deal with their fears in a constructive way, with support. Remind children and adults that it is "OK" to feel afraid. The experience can be positive and often such persons will watch and eventually find that at least "this dog" or "this cat" is "OK." Being able to control the situation may be a personal victory for that particular client.

Zoonoses are diseases that can be transferred from humans to animals or vice versa. Rabies is an example. Flu viruses, strep throat, and some dermatological conditions are also common zoonoses. More zoonoses seem to be transferred from people to animals. Be sure your animals are healthy and be aware of the client's health and protect your animal if necessary.

Sanitation is another concern may people express. A clean and healthy animal will not present any more of a problem than a clean and healthy person.

Bites and scratches can be a problem, especially when you combine an active puppy and a playful child. Preventive measures prove most effective: clip nails, watch carefully, and give warnings. If a bite or a scratch occurs, treat it immediately and notify the appropriate persons: parents, school officials, or care facility staff.

Depending on the situation and the state laws, other appropriate measures may need to be taken, such as notifying the Department of Public Health and quarantining the animal.

The ***death*** of an animal can present a problem where repeat visitations occur and the client experiences a real or perceived relationship with the animal. An animal's death should be approached just as the death of a person. Be honest and allow for grieving. This situation can also be a valuable opportunity for people to learn about and to deal with loss and life and death.

Possessiveness or unwillingness to share can be a problem if the animal is with a group. Establish rules for sharing. An opportunity exists here to ask the group members to empathize with the animal's point of view. This can be turned into a positive situation.

If ***inhumane treatment of the animal*** occurs, it may be necessary to remove the animal immediately, in a firm but kind way. Most of the time, such treatment occurs because a child or adult is ignorant of appropriate treatment. Giving suggestions on handling or showing the client an appropriate example usually corrects the situation. This kind of situation can present an excellent opportunity to discuss feelings.

Elimination ***accidents*** tend to concern many people, but with a well-trained animal suitable for animal assisted therapy, this should not be a concern. A more likely problem would be an animal vomiting. This could be caused by a well meaning person sharing an unsanctioned goodie, like candy, with the animal, or the animal contracting the flu from a client.

Some animals, such as birds or rabbits, are not as predictable as dogs or cats with their toilet habits. Inform the client about what might happen and how you expect them to behave if it does happen. Be prepared—always carry an emergency kit with plastic bags, paper towels, and disinfectant spray. Remain calm and clean up the mess. Your response will influence the entire situation. Better yet, be preventive if you can. Give the animal an opportunity to be relieved outside before the visit and at intervals during the visit. (Be sure you clean up after the animal outside!) When working with a puppy or kitten, if you have carried it for a time and then wish to let it play on the floor, first take it outside. Dogs, cats, puppies, or kittens will not eliminate while being held unless they cannot help themselves. If they need to eliminate, they will do so almost immediately upon being put down.

If more than one animal is present, ***relationships among the animals*** may present a problem. Let the animals become acquainted before the visit. If animals are not compatible, remove one of them. Be sure you are in control. If a "fight" occurs, do not get excited. Separate the animals and leave the area as soon as possible. Do first aid if necessary. Let any one who witnessed the conflict know that all is well as soon as you can.

Occasionally animals are "***picky***" about their "friends." However, with a good therapy animal, this will not be obvious, or can be controlled by the handler.

Smells intrigue animals! Most of the time this will appear to be a positive interest. But, sometimes it can be too personal or embarrassing. Guide the animal away. If someone is offended, apologize. A dog who continually needs to check people out in this way is not appropriate for a therapy animal.

Leaving the animal alone while you tend to other business may also be a situation that will occur. Plan for the animal to be crated or arrange for a safe and comfortable place to leave it while you are busy.

Laws, state and local, may influence the inclusion of a pet in therapy. As awareness of animal assisted therapy is growing, so is the tolerance for pet presence in institutions, hospitals, places of business, and so forth. Become aware of state laws. Seek permission before entering a facility with an animal. If you are informed, you can inform. Most state laws prohibit the presence of an animal in a food preparation or eating area. Exceptions are made for service dogs. In some situations, pet therapy dogs may be considered service dogs.

Know your own liability insurance coverage and the coverage of the institution with which you work. Be able to speak knowledgeably if the need arises.

Be informed of laws involving other animals, bites, strays, and abuse.

Do not work with wild animals. In most states it is illegal to possess a wild animal, to take a wild animal into a public facility, or to do education with a wild animal unless a person has a special license or permit. Work with wild animals needs to be limited to observing (such as watching birds at a feeder or squirrels playing), looking at pictures, or reading stories. If you want involvement

with wild animals, find a wildlife rehabilitator, naturalist, or wildlife educator and discuss the possibilities with them. Opportunities do exist. (For more information on persons to contact in your area write to the National Wildlife Rehabilitators Association, RR 1, Box 125E, Brighton, IL 62012.)

Be knowledgeable about ***animal behavior***. At the end of this chapter, a resource list is included with books on animal behavior.

Guidelines

There are important guidelines that are imperative when working with animals and children in a counseling setting (Nebbe, 1990).

1. The counselor, therapist, or teacher must be established and effective before incorporating pets into the office or classroom.
2. The counselor, therapist, or teacher must *feel comfortable* and confident with the animal and the situation. The person in charge must always be aware of what is going on and always be in control.
3. The *administration needs to be aware* of what is being done and approve of it. This is why it is important for the counselor, therapist, or teacher to be knowledgeable about animals and animal assisted therapy and be prepared to convey that information to the administration.
4. The counselor, therapist, or teacher is *liable*. Check with your insurance agent for information. If you feel the response has been inadequate, continue checking with other companies. Insurance companies have different ideas about coverage in this area. If a personal pet is involved the personal liability coverage may be part of home owner's or home renter's policies. Again, it is a good idea to clarify this with your insurance agent.
5. The *temperament and health of the animal* is important. A commitment to the animal's health is imperative. Dogs and cats should have current shots and a health checkup as well as "just be feeling good." Be prepared to visit a veterinarian if the need arises. Even when fish are sick, they need to be cared for in the most humane way possible.

6. You are a *role model*. What the children learn is what they see you doing. Based on the child development information presented earlier, you are teaching the children about caring for others—animals and people. If an error is made, *error on the side of overdoing care. You can not teach too much compassion*.
7. A *proper environment* for the animal is essential. The animal needs an environment where it can be comfortable, remain healthy, and meet its needs. Choosing that environment and helping individuals to understand why you chose it is a chance to teach empathy as well as scientific knowledge.
8. If *death* occurs, treat it as any loss. Be as honest as possible. Model appropriate feelings. Follow the needs of the group. Talk about the death. Allow for grieving. If some individuals are more traumatized than others, work with them alone. There is a place for humor, but not disrespect. Stop disrespect immediately. "Doing something" appropriate with the body may be important. "Flushing" a dead fish is okay if handled appropriately! A full blown traditional funeral is not appropriate under most circumstances, creative alternatives may be preferred. (The book *The Tenth Good Thing About Barney* by Judith Viorst (1973)is an excellent resource.)

9. *Humane treatment* and respect for the animal are essential. A scared or uncomfortable animal needs to be relieved of the stress immediately.
10. Never speak harshly to an animal, *discipline* the animal harshly, or strike an animal. You are a role model. If the animal needs such discipline, the animal is not appropriate for the situation.
11. If the animal is *not suitable* for the situation, change the situation or the animal. For example, if a hamster is a biter, and continues to be one, something is wrong. Talk with the children about why the animal bites. Draw up new rules with the children's help so the animal will not be in a position to bite. Perhaps simply not handling the animal is a solution. ***If an animal is dangerous, it does not belong in an office or classroom.*** Be honest with the children about the situation. Children will be concerned about where the animal will go and what will happen to the animal. Working to find the best alternative is imperative. This is an opportunity to stress to children the responsibility of careful selection, responsible and knowledgeable rearing, and commitment to the animal.
12. Never assume a child knows how to *interact* with or handle an animal. Affinity between animals and children is natural, but often the child needs direction or information about what to do and how to do it. Also, the counselor, therapist, or teacher never knows who else has "modeled" human-animal interaction for this child.
13. You are ultimately *responsible* for the animal. Before you leave, check the animal, the food, and the equipment.
14. If you cannot always be there to take care of the animal, make arrangements with some other adult to check and to care for the animal for you. Sending a classroom or office pet like a hamster or guinea pig to different homes on weekends is not always a good idea. This can be stressful for the animal. If arrangements can be made for a custodian to feed and care for the animal on *weekends or short vacations*, leaving the animal in the office is best.
15. If *sending it home with children* is the only alternative, make up a guidebook of care and handling. Be sure to talk to a parent or adult yourself about proper care and handling. Leave your name and number or the name and number of another respon-

sible person if problems arise. Many positive things can come from this if it is handled carefully.

16. Be aware of the *problems* you may encounter and prepare for them in a preventive manner. Do not become over excited. Always remember you are a role model.

Evaluation

The best evaluation is feedback from the client. Do you like what you are seeing and hearing? Does the client interact with the animal in a responsible and caring manner? Do you feel good about it? If so, it is working. If not, pinpoint why and try again, or end the experience.

Insensitive handling can undo the benefits of a potentially beautiful and meaningful experience.

The pleasure which I derive from my dog is closely akin to the joy accorded to me by the raven, the greylag goose or other wild animals that enliven my walks through the country-side; it seems like a re-establishment of the immediate bond with that unconscious omniscience that we call nature. The price which man had to pay for his culture and civilization was the severing of this bond which had to be torn to give him his specific freedom of will. But our infinite longing for paradise lost is nothing else than a half-conscious yearning for our ruptured ties. Therefore, I need a dog that is no fantasy of fashion but a living animal, no product of science or triumph of formbreeding but a natural being with an undistorted soul.

Konrad Z. Lorenz

**Part III of this book includes a section devoted to Animals in the Classroom or Office.*

Resource List— Animal Assisted Therapy

Books and Publications About Animal Assisted Therapy

Arkow, P. (1986). *Pet therapy: A study and resource guide for the use of companion animals in selected therapies.* Colorado Springs, CO: The Humane Society of the Pikes Peak Region. (Can be obtained from Phil Arkow for $15.00. An overview of the entire field of pet facilitated therapy including resources and programs.)

Beck, A. and Katcher, A. (1983). *Between pets and people.* New York: G.P. Putnams Sons.

Bustad, L. K. (1980). Animals, aging, and the *aged.* Minneapolis, MN: University of Minnesota Press.

Corson, S. and O'Leary Corson, E. (1980). *Ethology and nonverbal communication in mental health.* New York: Pergamon Press. (The book where Corson's studies involving the human-animal bond are included.)

Cusack, O. (1987). *Pets and mental health.* Odean. New York: The Hayworth Press. (An overview of the research done in all areas of the human-animal bond.)

Cusack, O. and Smith, E. (1984). *Pets and the elderly: The therapeutic bond.* New York: The Hayworth Press. (A guide for developing pet therapy programs in nursing homes. Information is basic and complete to the date of copyright.)

Fogle, B. (1981). *Interrelations between people and pets* Springfield, IL: Charles C. Thomas.

Fogle, B. (1982). Pe*ts and their people.* New York: Viking Press.

Heipertz, W. (1981). *Therapeutic riding.* Ottawa, Canada: Greenbelt Riding Association for the Disabled, Inc.

Lee, R. L., Zeglen M.E., Ryan T., and Hines L. M. *Guidelines, animals in nursing homes.* (For copies send $6.00 to Delta Society, Century Building, Suite 303, 321 Burnett Avenue, South, Renton, WA 98055-2569, 206-226-7357. A manual on guidelines for developing resident animals and animal assisted therapy programs in nursing homes. Material may be applicable to other situations.)

Levinson, B. (1972). Pets and human development. Springfield, IL: Charles C. Thomas. (Much like his first book, but a broader and more inclusive view.)

Levinson, B. (1969). *Pet-oriented child psychotherapy*. Springfield, IL: Charles C. Thomas. (The first and still the best publication on the subject. Unfortunately Levinson's books are out of print, but can usually be found in university libraries.)

Nieberg, H. and Fischer, A. (1983). *Pet loss*. New York: Harper & Row.

Ruckert, J. (1987). *The four-footed therapist*. Berkeley, CA: Ten Speed Press. (Some very helpful "how to's" based on how Dr. Ruckert includes pets in her practice. Great resource, also. At the end of the book is a listing of service animal organizations.)

Serpell, J. (1987). *In the company of animals: A study of human-animal relationships*. New York: Blackwell News. (Required for all people interested in people behavior. Excellent analysis of human-animal relationships.)

Sussman, M.B. Ed. (1985). *Pets and the family*. New York: The Haworth Press.

Yates, E. (1973). *Skeezer, dog with a mission*. New York: Harvey House. (A true story written originally for children. Gives excellent insight into the possibilities of a therapy dog... where the animal is the therapist! Enjoyable reading for anyone.)

Books and Publications About Animal Behavior and Handling

Campbell, W.E. (1985). *Behavior problems in dogs*. American Veterinary Publications, Inc.

Fox, M. W. (1972). *Understanding your cat*. New York, NY: Coward, McCann and Geoghegan, Inc.

Fox, M. W. (1972). *Understanding your dog*. New York, NY: Coward, McCann and Geoghegan, Inc.

Monks of New Skete. (1978). *How to be your dog's best friend*. Waltham, MA: Little Brown and Co.

Neil, D.H. and Rutherford, C. (1982). *How to raise a puppy you can live with*. Loveland, CO: Alpine Publications.

Volhard, J. J. and Fisher, G.T. (1983). *Training your dog: The step by step method*. New York, NY: Howell Book House, Inc.

Copies of conference abstracts may be available from the Delta Society. Also available from Delta Society and the Latham Foundation are audiovisuals and other bibliographies. (See page 52 for addresses.)

Organizations

Delta Society

Century Building

321 Burnett Ave. South, Suite 303

Renton, Washington 98055-2569

(206)226-7357

(Delta is a non-profit professional organization—objectives: research, publication, resource, and public service)

The Latham Foundation

Clement and Schiller Streets

Alameda, California 94501

(The Latham Foundation is a seventy year old organization dedicated to people, animals, and the environment. Thanks to a small, annual subscription rate to the Latham Newsletter.)

CENSHARE

Box 197 Mayo Bldg.

University of Minnesota

Minneapolis, MN 55455

(CENSHARE is the Center to Study Human / Animal Relationships and Environments is a resource center on the human / companion animal bond. Educational materials and information are available through CENSHARE.)

NWRA

National Wildlife Rehabilitators Association

RR 1, Box 125 E

Brighton, IL 62012

International Wildlife Rehabilitation Council

4437 Central Place

Suite B-4

Suisun, CA 94585

64

The ward was quiet, or almost so; the children had gone to bed, lights had been dimmed. Clicking on the terrazzo floor was the sound of Skeezer's nails as she made her rounds: into one room and up to a bed, snuffling at the figures hunched down under blankets, drawing her tongue across a hand hanging over the edge of the bed, not staying long in any room but going on to the next. At one door she paused. Muffled sounds were coming from under the pillow that had been pulled over a small head. "I want to go home—Mummie, Daddy, come get me."

Skeezer's nose worked as she sniffed the smell still new from the many that were familiar. Slowly she crossed the room to the bed. Resting her head near the pillow, she nuzzled under it inquisitively. Wet cheeks were not unusual to her, nor was the taste of salt. She licked until there was a response, a turning of the head, a breath indrawn quickly. Skeezer lifted a large front paw and laid it on the bed, then she took an edge of the pillow between her teeth and tugged at it. A tousled head emerged, a hand crept up to cover the paw.

"Oh, Mickey, I'm so glad you're here."

It never mattered to Skeezer by what name she was called. All she cared about was the sound of a voice.

Rosey Ann moved over to make room. With ease of custom, Skeezer was up on the bed and stretching herself out alongside its occupant. There was a choked sigh, then another kind of sigh with a rumble in it as the two snuggled close together.

Yates, 1973

Annie was a pretty seven-year-old girl who was fearful, angry, and withdrawn. It took many weeks before she could be induced to leave her mother and come into the playroom. When she started to express her feelings, they were always of anger and rage—no other affective experience seemed available to her. In her sessions, paints were flung around the room or poured on the floor; clay was hurled at the ceiling or light fixtures; language, when used, usually consisted of obscene words. Annie's well of anger seemed inexhaustible. One day, I mentioned that my cat had a new litter of kittens. She seemed quiet but interested, so I reported more and noticed that she sidled up close to me, tentatively, but quite definitely. When the kittens were old enough to run about, I brought two of them and the mother cat into the playroom. Annie ran toward the kittens, but they scampered under the furniture to safety. I suggested that perhaps they were afraid of her, that they did not know she was friendly, and she would have to win them over—show them they could trust her. Sometimes kittens, like children, are afraid of people they do not know.

However, Midnight, the jet-black mother cat with golden eyes, was more trusting and jumped into Annie's lap. Annie was overwhelmed when the cat curled up and purringly dozed off in her lap, her face quivering with the onrush of new and unfamiliar emotions. She looked up at me as if for reassurance that this was really happening. Gradually she stroked the cat and started to speak haltingly, but with unmistakable tenderness. When the kittens tired of their romping, they discovered mamma on Annie's lap and crawled up to join her. This was the ultimate joy. For many weeks thereafter, Annie played with the cat and kittens, at first repeating over and over again play situations in which she acted out her new-found feelings of tenderness, trust, and love. Gradually, as the kittens grew larger and friskier, she allowed herself to express anger too, by taking the role of the scolding mother. We were able to move gradually towards more direct relatedness to me with verbalized communication becoming more and more possible.

Levinson, 1972

66

Chapter 6

Horticulture Therapy

Plants need man's care to develop best, but the man also requires contact with plants to develop and maintain a mental wholeness. Plant life is a link that binds man to his world and to his environment.

Damen R. Olszowy

Rhea R. McCandiss, a leader in horticulture therapy, described this field as using "the knowledge of plants and gardening, greenhouse and floristry skills as a tool to develop a relationship with a patient (or client) for the dual purpose of helping that patient with the problem of adjustment, and encouraging the patient to develop a broader interest in his or her surroundings as a result of the increased knowledge of the plant world" (McDonald, 1976).

Alice Burlingame, another horticulture therapy veteran, added to this definition. "In horticultural therapy, you develop a program of working with flowers and plants, with the primary objective being to raise the level of motivation for the patient (client)—whether his or her problem is mental or physical. Response will come from the patient in a renewed confidence, a warm feeling of achievement, and a greater interest in tomorrow than yesterday" (McDonald, 1976).

History

Plants are the base of the food chain. We evolved depending on plants for our basic food needs. Originally gatherers, we traveled about and searched for food. As civilization evolved, we learned that we could select, grow, and nurture the plants we needed. We could provide our own food.

In addition to supplying a basic need for food, early plants contained other important properties. Plants were used for medicine, housing, tools, clothing, and pleasure.

Early prehistoric references can be found regarding the healing effects of working with and being with plants. Documents from Egyptian history tell of physicians prescribing walks in the gardens for disturbed patients. The early nineteenth century hospitals in Europe involved patients in growing and harvesting crops on institutional farms. In 1879, the Pennsylvania's Friends' Asylum for the insane (later the Friend's Hospital) had a greenhouse for use with mentally ill patients. In Michigan, the Pontiac State Hospital involved its patients with farming activities in the late nineteenth century (Copus, 1980).

The beginning of the recent development of horticulture therapy probably began at the conclusion of World War II. Members of the National Federation of Garden Clubs volunteered at veterans hospitals all over the country. They introduced the veterans to growing plants and gardening. In 1950, Dr. Karl Menninger supported patients' involvement in greenhouse operations at the Winter V. A. Hospital in Topeka, Kansas. Later Dr. Menninger established horticulture therapy programs as part of the patients' treatment at the Menninger Clinic. Rhea McCandliss developed and directed that program (Copus, 1980).

During the 1950s, workshops on horticulture therapy were presented around the country. Dr. Donald Watson and Alice Burlingame represented Michigan State University in this pursuit.

The 60s and 70s represented growth and stabilization for horticulture therapy. Federal agencies funded a growing number of horticultural demonstrations and program expansion projects. The American Horticultural Therapy Association was founded in 1973 as the professional organization for people involved in horticulture therapy.

College programs in horticulture therapy were developed. The first masters degree in horticulture therapy was earned by Genevieve Jones in 1955 at Michigan State University (Copus, 1980). In 1971, Kansas State University initiated the first master of science degree in the field of horticulture therapy (Olszowy, 1978). Other colleges and universities followed suit, adding courses in horticulture therapy.

Informally, horticulture also plays a significant role in many of our cultural traditions. Plants as gifts are a symbol of positive thoughts and good wishes. Plants or flowers are given to express friendship, to express get well wishes, to offer apologies, and to wish well for grand openings. Plants are incorporated into important celebrations and life's special occasions, for example, weddings, funerals, Mother's Day, birthdays, and proms.

Research

Although not much formal research is available to support the effectiveness of horticulture therapy, much informal support exists.

Charles A. Lewis, an adviser to the New York Housing Authority Tenant Garden Contest, found that tenants who involved themselves in improving their buildings and grounds took pride in their accomplishments. Garden plots and related activities resulted in new attitudes toward the community. Vandalism was reduced in areas where there were gardens (Olszowy, 1978).

Elvin McDonald, in his book *Plants as Therapy*, cited numerous case studies of clients or patients helped by horticulture therapy (1976).

The growth and stability of the entire field of horticulture therapy is a testimony to the fact that those involved with the field believe in what they are doing and believe that it works.

How Horticulture Therapy Works

Programs in horticulture therapy can be found in many settings, including correctional facilities, alcohol and drug rehabilitation

centers, training centers, work co-ops for physically handicapped and mentally handicapped, special education programs for exceptional students, and programs for the blind. People with other disabilities and other groups of people have tailored horticulture therapy programs to fit their needs.

Horticulture therapy programs may include farm, greenhouse, and garden programs. Programs can also be found in hospital rooms, classrooms, and kitchens.

In one hospital, each child admitted is assigned a plant which the therapist feels best fits that child's situation. The plant receives treatment from the child parallel to the treatment that the child will receive from the hospital staff. Fertilizer is injected into the soil with a needle like the one used to give shots to the child. Broken limbs can be removed from the plant and the plant can continue to grow and be healthy. Often shoots are taken from the plant, rooted, and planted in another pot to signify that the child will be safe and sound away from the family (Rae & Stieber, 1976).

Following are ways of using horticulture therapy:

- An individual can gain new skills through horticulture therapy which may be only informal knowledge or of such magnitude that they become a new hobby or vocation (Olszowy, 1978).
- Horticulture therapy can provide opportunities to improve communication skills (Olszowy, 1978).
- Horticulture therapy may present a challenge.
- Working with plants can stimulate curiosity, questioning, and sensory awareness (Olszowy, 1978).
- Horticulture therapy can provide social interaction with the therapist, with the group, or with others outside of the group as they share interests and accomplishments (Olszowy, 1978).

- Horticulture therapy with group involvement may be a catalyst for positive group experiences, enhancing the opportunity to learn responsibility, cooperation, and respect for others in the group (Olszowy, 1978).
- Horticulture therapy can help improve confidence and self-esteem.
- Through horticulture therapy, clients may relieve tension, frustrations, and aggression in an acceptable manner (Olszowy, 1978).
- Horticulture therapy can create opportunities for self-expression and creativity (Olszowy, 1978).
- Horticulture therapy can provide opportunities for giving as one cares for the plants, as well as opportunities to use plants and products of horticulture care as gifts.
- Horticulture therapy activities help develop and improve basic motor skills. Specific activities can be planned for specific therapeutic benefits (Olszowy, 1978).
- Horticulture therapy can increase activity both indoors and outdoors (Olszowy, 1978).
- Horticulture therapy can aid in teaching about life and life processes. Birth, care, growth, and death are among common experiences.
- Horticulture therapy can offer a living reality of acceptance and of responsibility, achievement, and success.
- Horticulture therapy can teach patience and delayed gratification.
- Horticulture therapy can help to enhance concentration.
- Horticulture therapy can provide contact with the natural environment.
- Horticulture therapy can encourage opportunities for choices and decisions.
- Horticulture therapy can engender peer respect through achievements in horticulture therapy.

Therapy using horticulture can take place without directly working with plants. A comfortable tone or atmosphere can be set in an office or building by having plants in the environment. Ian McHurg, the architect, believed plants enhance the health of any

atmosphere (McHurg, 1969). Elvin McDonald, author of *Plants as Therapy* (1976), not only noticed but was told by friends and relatives that his house was much more "friendly" when filled with plants. Taking a walk in a garden, visiting a flower shop, observing plant displays, and sending flowers are all horticulture therapy.

Problems

A few potential problems must be considered before initiating a project or program of horticulture therapy.

Although the term horticulture therapy suggests that *garden space or greenhouses are desirable*, many simple activities can be done with very limited space indoors.

For many large undertakings, *equipment* is necessary for horticulture therapy. Equipment costs money and needs maintenance. It is important to know what will be needed before beginning a project.

Most horticulture activities, like growing a plant, take *time*. Therapy must be planned over a consistent known time frame.

Expenses may pose a problem, although many inexpensive and innovative activities can be undertaken with planning. Plants and materials may be available from horticulturalists for the asking, rather than buying new bulbs, plants, or seeds.

Failure of the project or death of the plant may not necessarily be a problem, but will need to be addressed. If group work is undertaken, perhaps that possibility can be considered in advance by providing a few extra plantings.

Proper conditions are necessary. In most cases, conditions can be modified to work. Proper selection of plants for north windows, grow lights, or projects where little light is required are examples of adaptions that can be made. The therapist needs to consider in advance the requirements for success and the alternatives if a project is not successful.

Allergies may pose a problem. Procedures for handling or alternate activities need to be thought through in advance.

Accidents or injuries usually do not happen, but they can occur. First aid care needs to be available whether the injury is a splinter from a cactus spine or a cut from a hoe.

Getting dirty may bother some people. Participants need to be aware of the activity ahead of time so fear of soiling clothing will not hamper the experience. Clothing covers may need to be provided.

Guidelines

These guidelines need to be considered when undertaking a horticulture therapy project.

1. Undertake projects that you can achieve with your group or client. A successful, small project is better than something elaborate which cannot succeed. Simple and small projects will keep the interest of your clients and insure success.
2. You do not need to be an expert, but be sure you know what you are doing. In other words, do your homework or go to an expert for advice. Some resources are listed at the end of this section. Experts are very willing to offer advice and share knowledge.
3. Set attainable goals and objectives when you plan each project: keep those goals and objectives in sight. Be willing to be flexible if your expectations are too high or different from achievable results.
4. Be prepared for the total project including the cleanup. Ample newspapers under your work area, availability of running water, and rags to clean up spills are important materials.
5. With simple projects, accidents and injuries are rare, but be prepared for simple first aid if necessary.
6. Be prepared to deal with the death of a plant as with any loss. Disposal of the plant in a compost pile or returning it to the earth are more appropriate than a wastebasket and emphasize the idea of life giving life.
7. Do not forget you are a role model teaching about life! How you handle and work with the plants sends important messages to your clients. If you model a passion and reverence for life, you are giving a precious gift!

Evaluation

The easiest evaluation is your own response. How do you and your clients feel about what has happened? Have you achieved your goals and objectives? What did you and your client learn from the experience? What else has happened, positively, negatively, or indifferently, that is related to this specific therapy? Weighing all facets, was it worth doing? Is it worth doing again?

Resource List—Horticulture Therapy

Copus, E. (1980). *The Melwood manual, A planning and operations manual for horticultural training and work coop programs.* Ed 200793. (This is a how to manual including organization, fundraising, trainee admission, program development, technical requirements, production and sales, maintenance and management, and various program designs.)

McDonald, E. (1976). *Plants as therapy.* New York: Praeger Publishers.

Olszowy, Damon. (1978). *Horticulture for the disabled and disadvantaged.* Springfield, IL: Charles C. Thomas. (This book is still in print and full of activities and practical applications.)

Watson, D. & Burlingame, A. (1960). *Therapy through horticulture.* New York: MacMillan Company.

American Horticultural Therapy Association
9220 Wightman Road, Suite 300
Gaithersburg, MA 20879
(301)948-3010

A national symposium entitled "The Role of Horticulture in Human Well-being and Social Development," Cosponsored by four major horticultural agencies, was held in April, 1990 in Arlington, Virginia. For more information about the symposium and its proceedings, contact Dr. Diane Relf, Department of Horticulture, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061-0327.

Shortly after Christmas vacation, Ms. Wood introduced her 13 fourth-grade, learning disabled students to an Amaryllis bulb. The class celebrated "her" planting with a birthday party and a name, Katherine. Everyday the whole class discussed what each person was observing. Amaryllis grow rapidly, so dramatic changes took place in a short time. Some students measured the plant, some watered Katherine, some set her in the sun during the day but moved her away from the chilling window at night. Careful note was taken as buds were observed. Then, one day a flower bloomed. Ms. Wood was greeted with a note on her desk from one of her students, "Katherine, she got's a baby!"

"This was such a special experience for the whole class, one of awe and wonder. I do not think any of the children had ever seen anything like this before. It was the whole process of life right there in front of them. It was such a healthful and positive activity."

Ms. Wood.

Tracy was new in our school. She and her sister had just been adopted after first living with two different foster families. Tracy had been sexually abused by her natural father, her caretaker after her mother "left." Tracy's foster mother originally called the school and requested that the counselor see her child. A very positive relationship was established with the counselor. Tracy had shown a strong interest in a plant in the counselor's office and had asked for the privilege of watering it. After only two months, the mother decided it was time to end the child's relationship with the counselor and angrily called the counselor to inform her. This was a pattern that was repeated many times and in many settings; clearly the new mother also had serious problems. Already in a difficult situation, Tracy was now having problems with learning, with friends at school, and with her new mother at home. It was devastating to her when the counselor explained the mother's call and told Tracy that although they would remain very good friends, for the time being they could no longer meet.

Tracy's eyes welled up with tears. "But what about your plant! It will die with no water."

The counselor answered, "Perhaps you could continue to come in before school and water it. We won't visit, but you can take care of the plant."

Tracy smiled. She continued to water the plant, some mornings stopping to visit with it as she carefully poured the water on the soil. Sometimes her news was good: "This morning was pretty good. Mom said my homework was good." Other times her news was not so good: "Sometimes I hate Mom. I can tell you that: you will not tell anyone." The counselor was often in the room and listened, but they did not need to visit.

Linda Nebbe

Terri, a girl with little confidence, went with her youth group on a three-day wilderness canoe trip. It was evident from the start that Terri only went because her boyfriend was going. It was clear she loathed the thought of the experience and hated every minute of the trip. She especially hated getting dirty and using the weeds for a bathroom. A storm made the trip very difficult. Not only were the campers chilled, but making a fire and cooking dinner was impossible. As much as she hated the trip, Terri worked hard to cooperate and do her share. When the trip was over, Terri was found crying. Her words were a surprise, "You know, I hated this. But I did it! I think I can do anything, now!" Although Terri never attempted another wilderness canoe experience, she did return to camp as a volunteer and later as a counselor. In this way, she reaffirmed the strong and special person she discovered on that original trip.

Linda Nebbe

Chapter 7

Natural Environment Therapy

The best remedy for those who are afraid, lonely, or unhappy is to go outside, somewhere where they can be quite alone with the heavens, nature, and God. Because only then does one feel that all is as it should be and that God wishes to see people happy, amidst the simple beauty of nature. As long as this exists, and it certainly always will, I know that then there will always be comfort for every sorrow, whatever the circumstances may be. And I firmly believe that nature brings solace in all troubles.

Anne Frank

The purpose of natural environment therapy is to aid participants as they seek personal identity and "optimum" development of personal resources. Therapy can occur as a result of the natural healing in nature or with the use of therapeutic activities in natural settings. Natural environment therapy involves a variety of possible experiences ranging from a wilderness survival trip to a walk in the garden.

History

Humans evolved with the earth, with and within the natural environment. With the exception of recent years, people have lived in total contact with and as part of the natural environment. Now separated and protected from the natural contact, we look for ways to fill the emptiness left by the lack of contact.

Outward Bound, a successful program that reunites people with their environmental roots, originated as part of a unique school program designed by German schoolmaster, Kurt Hahn. Conceived in Germany, the school later moved to England and then to Wales as a result of World War II. In Wales, the outdoor training program of Hahn's school evolved into another school, Aberdovey, developed to train "soft" British seaman in survival skills. The positive influence of the program was noted. After World War II, Aberdovey evolved into what is known today as Outward Bound.

Outward Bound programs are found all over the world. The philosophy of Outward Bound is learning through experience. Originally a two-week wilderness survival experience, Outward Bound has been adapted to fit the needs of many diverse groups. The Outward Bound program effectively built self-confidence, stretched emotional and physical limits, developed leadership skills, and promoted personal growth and responsibility (Wilson, 1981).

The Colorado Outward Bound School was the first of its kind in the United States. It has been a leader in adapting the Outward Bound concept to a variety of situations and populations. These included adult offenders, classroom teachers, corporate personnel, the developmentally disabled, recovering alcoholics, incarcerated criminals, juvenile delinquents, and school children.

Outward Bound is a total living and learning experience which includes three elements:

1. A natural environment devoid of most of the trappings of modern civilization. This is an environment unfamiliar to most participants.
2. A unique social environment of nine to twelve people living and learning together. This group must act as a team, developing cooperative efforts and group decision-making abilities in order to succeed.
3. A challenge of learning to cope with the environment and the social group. Challenges include tasks of daily living for both the individual and the group. The tasks are of consequence and require mental, emotional, and physical resources. Tasks might include routine living problems, such as route finding, mountain climbing, and cooking, or unusual tasks such as holding out in a storm, crossing a difficult river, or dealing with accident or injury.

Other programs have developed from the original Outward Bound concept (Gillis, 1985). One of these is *Project Adventure*, founded in 1971. Project Adventure calls itself an "alternate to Outward Bound." Those elements of the Outward Bound experience that made it successful were isolated and then put into a feasible program for school. Those elements were:

1.Primary objective of Outward Bound:

To produce a changed self-image in self-concept, and to motivate to learn.

2. Five factors of the Outward Bound Program:

A. Stress

B. Group living experience

C. Success for individual and group

D. New environment

E. Individual experiences

3.Three factors essential to change of self-concept:

A. Adapting to a changing environment

B. Sharing of self with others

C. Receiving feedback about oneself from others (Coriseneau, 1979)

A Project Adventure curriculum includes the following elements:

1. A sense of adventure
2. Unpredictability
3. Drama
4. Suspense
5. A high level of expectation
6. An orientation toward successful experiences
7. An atmosphere of mutual support, cooperation, and encouragement
8. An opportunity for enjoyment, fun, and the ability to laugh at oneself and others
9. A group problem-solving approach to learning; and
10. A combination of active involvement with person/group reflection and evaluation, always open to the teachable moments

The Project Adventure aspects are presented through activities laid out on a "ropes course" or through "incentive games." These activities include elements of individual "risk-taking" and team cooperation. For example, the "ropes course" is a series of outdoor activities that could include the following:

- Determining how many children can stand on top of a rock or stump
- A twelve-foot-high wall for individuals and teams to scale
- A bridge crossing a deep ravine and consisting of three cables, one for the feet to walk on and two for the hands to hold onto
- A fallen tree to balance on and walk across
- A marked area, designated as an alligator river, which individuals or teams must cross without being "eaten"

New Games, developed by Stewart Brand and George Leonard, is another action-oriented program inspired by Outward Bound. This book includes a collection of action-oriented games which are safe and fun for all participants and in which everybody wins. For example, "Bofting" is dueling with a three-foot polyethylene foam sword, and "Earth Ball" involves a variety of games designed around a giant "earth ball." Participants push the ball around or ride on the ball.

Playfair, created by Matt Weinstein and Pamela Kekich, is another Outward Bound-inspired program. Playfair uses an audience participation comedy show format for noncompetitive games to create a high spirited feeling of community.

School camping and environmental education are defined as subject matter and are also related directly to the influence of Outward Bound. "Environmental education is extending from the school curriculum to the outdoors those things which can best be taught outdoors" (Ford, 1981). Environmental education deals with all aspects and parts of the school curriculum. In addition, it "utilizes the outdoors to cultivate a reverence for life through an ecological exploration of the interdependence of all living things, one on the other, and to form a land ethic illustrating man's temporary stewardship for the land" (Ford, 1981).

Although defined as subject matter, cognitive in nature, environmental education programs are moving into the awareness and values realm. Steve Van Matre (1974), a pioneer in the awareness movement, said it this way, "I feel that self-awareness follows natural awareness, and that it is most often a by-product of pursuing the latter, rather than the result of being sought after as an end in itself." Van Matre (1972) also believed "once he (the student) has felt this unity with Nature, he is more hesitant to destroy her; he realizes that to do so would be to destroy himself. And in the process he has achieved a heightened awareness of and a greater sensitivity for all forms of life, including his fellow man."

Clifford Knapp and Joel Goodman directly focused on a person's identity and values with their book, *Humanizing Environmental Education: A Guide for Leading Nature and Human Nature Activities,* which featured values clarification and personal awareness (1981).

Research

The effectiveness of the Outward Bound programs has been noted informally and documented formally. Today over 80 such wilderness/adventure rehabilitation programs are in existence. The general goals of such programs are:

1. Affecting students' or participants' attitudes, sense of self worth, pride, and belief in themselves.
2. Affecting the major components of the students' or participants' environment, the living situation, family, school participation, and job potential.

3. Providing systems of support for a minimum of one year of continuing recontact through a caring relationship both in day to day environment of the participant and the wilderness (Flood & McCabe, 1978). These programs appear to be successful as noted in participants' behavior changes toward desired goals (Flood & McCabe, 1978; Mills, 1978; Mortlock, 1979; Owan, 1980; Syobodny, 1979).

Evidence from studies done involving Project Adventure participants also indicated affective changes in self-concept, improved physical education skills, more self confidence, and greater self-esteem (Final Quantitative Evaluation for 1971-71 Project Adventure).

The teaching of environmental education contributes to an individual's growth in attitude toward the environment and enhancement of self-concept. (Childs, 1980; Crompton & Sellar, 1981; Roth, 1976; Roth & Helgeson, 1972).

How It Works

According to the Colorado Outward Bound Program, there are three dimensions to the therapeutic process of their program—the physical environment, the social group, and the individual (Chase, 1981).

The physical environment for the program is the natural environment. Living in the natural environment fulfills people's basic need for personal connection with the natural environment. People developed or evolved in the natural environment. Returning to that environment provides a natural transition to awaken latent survival instincts.

Living in the natural environment is also a new and different experience for most people. New skills are necessary; new behaviors are learned. The natural environment is a behavior setting that evokes coping rather than defensive behaviors. Examples of coping behavior are self-sufficiency, risk-taking, initiative, and cooperation. Coping behaviors in the wilderness are positively reinforced by survival! Contrast this with the defensive behaviors elicited by our stress-producing modern civilization. People are placed in large social groups with an overabundance of ambiguous, conflicting, and threatening stimuli. People tend to respond to this stress with defensive behaviors such as rationalization, repression, denial, social withdrawal, or flight from reality. Such responses become habitual and are difficult to change within the environment that triggers them.

Outcomes of dysfunctional behavior are clear and easily understood within the simplicity and predictability of the natural environment. In the wilderness, there are clear choices and few rules. You are either clean or dirty, hungry or well-fed, miserable or comfortable. The natural environment offers a feedback mechanism that is concrete, immediate, unprejudiced, and impartial. People must interact with it in a responsible, coping way to ensure survival.

The second dimension of the therapeutic process of the Colorado Outward Bound program is the social group. The literature about the therapeutic nature of wilderness experiences emphasize the social or group interaction therapy which fits easily into traditional therapeutic methods and models of therapy. In addition, there are new dimensions to the therapeutic value of the social group, because of the unique nature of the natural environment as discussed above.

People evolved not only within the natural environment, but also within small social groups, as opposed to the larger, more confusing social groups of modern civilization. Returning to the natural setting simplifies the social system and nurtures its participants.

Psychologists agree that through interaction with other individuals, the self is defined, nurtured, and maintained. In modern civilization much of an individual's identity and interaction with others is role-bound. The life script is written and it is difficult to diverge from that script. In the wilderness setting and the new, smaller social group, people are on an equal basis. Cultural roles, failures, and cultural crutches are left behind. As the experience develops, the common challenges that face the group demand interdependence. Group members must learn to communicate, to cooperate, and to depend on each other and to trust each other.

Individual growth is the third dimension of the therapeutic process experienced in a wilderness survival experience. Because of the nature of the experience, the participants encounter a wide range of human reactions including fear, joy, fatigue, hunger, respect, trust, pain, and love. Participants learn to better understand themselves through self-discovery of the feelings and learning to deal with these feelings in an appropriate way.

The individual grows while facing the challenges of the environment and of the social group. Many of the challenges are new, frightening, and involve risk. As challenges are met, new skills are

developed and a sense of accomplishment achieved. Out of these, come greater self-confidence and high self esteem. "The physical experiences at Outward Bound are not an end, but a means to an end, as they promote individual growth and encourage new levels of cooperation and human relations" (Chase, 1981).

Goals

Natural environmental therapy can be implemented in many ways to help individuals.

Environment

- Natural environment therapy can provide opportunities for attaining knowledge and understanding to yield more self-confidence.
- Natural environment therapy offers an individual chances to interact with the natural environment and experience natural healing.

Social

- Natural environment therapy can provide group interaction.
- Natural environment therapy can present opportunities for interaction outside the group through nature experiences and new interests.
- Natural environment therapy can give participants an experience as part of a "community."
- Natural environment therapy can provide an opportunity for the development of communication with group members.
- Natural environment therapy can provide a way to resolve issues as the participant accepts responsibility for dysfunctional behavior and internalizes motivation for creating positive changes (Chase, 1981).
- Natural environment therapy can enhance a sense of responsibility for self, for others in the group, and for society (Chase,1981).
- Natural environment therapy can provide way to experience the wide range of human reactions, expressed and received appropriately (Chase, 1981).
- Natural environment therapy can heighten the ability to trust and to be trusted (Chase, 1981).

Individual

- Natural environment therapy can increase an individual's powers of observation, sensitivity, and perception.
- Natural environment therapy can arouse individual's sense of curiosity.
- Natural environment therapy can help a person to release pent-up emotions.
- Natural environment therapy can begin development of life-long interests (leisure and career).
- Natural environment therapy can help develop motor skills.
- Natural environment therapy can motivate individuals to learn and to live.
- Natural environment therapy can provide opportunities to aid understanding of life and death.
- Natural environment therapy can increase self-esteem and self-confidence (Chase, 1981).
- Natural environment therapy experiences can aid an individual's understanding of the true values of cooperation, interdependence, and compassion (Chase, 1981).
- Natural environment therapy can offer participants a fertile setting to become aware of their dysfunctional and functional behavioral patterns. Such a setting is not possible within our traditional civilization (Chase, 1981).
- Natural environment therapy may improve an individual's physical health and awareness of the importance of maintaining physical fitness (Chase, 1981).
- Natural environment therapy can provide new avenues for recreation which are creative, fun, and growth enhancing to be discovered (Chase, 1981).

Problems

Here are some of the problems one might encounter working with natural environment therapy.

Safety has been an on going concern of Outward Bound and Project Adventure. Although accidents are few, experience, training, knowledge, and the ability to handle emergencies are prerequisites of leadership. On all outings, training and guidelines for the participants are important.

Insects, fleas, ticks, mosquitoes, and bees bother many people. The threat can be diminished with advance knowledge of the insect, insect repellent, and instructions about handling an encounter with the insect.

Fears associated with the outdoors are uncommon and often based on ignorance. Asking directly about such fears, naming them, and pointing out misconceptions helps in many cases. Allow the fear. Talk about alternative ways of dealing with the fear. Give participants the responsibility for taking care of themselves. If handled in this way, the experience may become an empowering one. If a fear is known and can be avoided, avoid it, unless that is part of the goal or work of the therapist and participants.

Weather can be a problem. On longer sojourns, weather is one of the natural consequences and risks that participants must survive, whether they are merely uncomfortable or in danger. On shorter outings, weather must also be considered. Therapists must know their goals and choose an alternate activity if inclement weather interferes. Uncomfortable weather can often spoil an otherwise super experience because the participants can not help will focus on the weather and their own discomfort.

Often participants express a fear of *wild animals*. The fear in this case far outweighs the reality. On long nature trips the expert leader will know how to deal with marauding bears and curious raccoons. On short trips, animals are seldom encountered, since wild animals want to stay as far away as possible from their biggest enemy, humans! Animals will fight or harm people when people meddle and the animal perceives it is cornered or in danger. Such situations should be discussed before the outing, telling participants that if they see a wild animal to look but not to interfere with or bother the animal. If anyone perceives danger, they should leave the area immediately and report the situation to a leader. At times orphaned, injured, or ill wild animals may also be encountered.

Again participants should be forewarned to leave the animal alone and to report the incidence to a leader. If the situation indicates that something needs to be done, the leader can contact a conservation officer or a wild animal rehabilitator to care for the sick, injured, or orphaned animal.

One of the biggest problems is the possible *destruction of the natural environment*, such as tramping down habitat, picking wild flowers or fruits, or removing parts of the natural environment. In most states these activities are illegal. Before the outing participants need to be informed of the rules and why they exist. Unfortunately, in many places areas of natural environment are rare. Challenging the participants to care for this special space may in itself be a very constructive incentive.

Getting lost is a real concern and can happen in the smallest city park. Before going out, give rules and guidelines. First, outline what is expected from the participants as far as movement away from the group. Second, give directions on what to do in case participants do become disoriented or separated from the group. The type of environment, length of the outing, and skill of the individuals will determine the extent of these directions. In many natural areas, if the disoriented participants find a path and continue to follow it, the path will lead back to a central location. Sometimes staying put, or staying in one spot and signaling with sound or visual, might be a solution.

Guidelines

These guidelines are for the wilderness or environmental experience itself and also for the planner before ever considering a wilderness adventure.

1. On long wilderness outings, and on outings into unfamiliar places, *leadership with experience and expertise* in wilderness camping is imperative. Nothing should be undertaken if the leaders do not feel completely comfortable with the situation and the environment.
2. On short sojourns, the *leader needs to be familiar with the place*.
3. The leaders always must *be prepared for emergencies*. A person trained in first aid and CPR should be readily available. Have plans ready for any possible situations.
4. Be sure *someone at a base office knows where you are going*, who is going with you, what you will be doing, and when you are expected back.

5. Be sure *participants have written permission* for the trip, if it is needed.
6. If a *physical examination* is necessary, be sure it is included as a prerequisite.
7. As leader, *know your participants.*
8. As leader, *know your goals and expectations.*
9. As leader, *know the state and federal laws* that may pertain to where you are going and what you will be doing. (ie. fires, picking wild flowers, removal of natural objects, and so forth.)
10. *Be sure the participants know the guidelines, laws, rules, and expectations for the journey.*
11. If the experience is of short duration, try to make the *experience comfortable* for the participants. If wet or very cold weather disrupts, have an alternate plan ready. Weather and uncomfortable conditions are part of longer adventure trips and participants need to be warned that such conditions will occur. Physical and mental preparation make these times more endurable.

Walk away quietly in any direction and taste the freedom of the mountaineer. Climb the mountains and get their good tidings. Nature's peace will flow into you as sunshine flows into the trees. The winds will blow their own freshness into you, and the storms their energy, while cares will drop off like autumn leaves.

John Muir

I will lift up mine eyes unto the hills, from whence cometh my help.

The Bible—Psalms 121:1

55

Resource List—
Natural Environment Therapy

The following books contain "awareness" oriented "natural" experiences:

Caduto, M. J., and Bruchac, J. (1988). *Keepers of the earth: North American stories and environmental activities for children*. Golden, CO: Fulcrum, Inc.

Cornell, J. (1980). *Sharing nature with children*. Emeryville, CA: Publisher's Group.

Cornell, J. (1987). *Listening to nature*. Emeryville, CA: Publisher's Group

Cornell, J. (1989). *The joy of nature: Nature activities for all ages*. Emeryville, CA: Publisher's Group.

Knapp, C. and Goodman, J. (1981). *Humanizing environmental education: A guide for leading nature and human activities*. Martinsville, IN: American Camping Association.

Project WILD. P.O. Box 18060, Boulder, CO 80308-8060. (303)444-2390. (Project WILD was sponsored by the following organizations: American Fisheries Society, Canadian Wildlife Federation, Defenders of Wildlife, National Wildlife Federation, The Wildlife Society, and U.S. Fish and Wildlife Service.)

Project WILD supplement. The Humane Society of the United States, 2100 L Street NW, Washington, DC 20037. (The Humane Society of the United States and other organizations were originally sponsors of *Project WILD*. They were not pleased with the final product because they felt certain issues were presented with a bias. They then printed their own supplement to the material.)

Van Matre, S. (1972). *Acclimatization*. Bradford Woods, Martinsville, IN: American Camping Association.

Van Matre, S. (1974). *Acclimatizing*. Bradford Woods, Martinsville, IN: American Camping Association.

Van Matre, S. (1980). *Sunship earth*. Bradford Woods, Martinsville, IN: American Camping Association.

Project Learning Tree. American Forest Institute, Inc., 1619 Massachusetts Avenue, N.W., Washington, DC 20036. (Project Learning Tree was developed by the Environmental Education Council with a grant sponsored by the American Forest Institute.)

For individuals wishing more information on therapeutic wilderness experiences contact:

Colorado Outward Bound School
945 Pennsylvania
Denver, CO 80203

A walk down the most barren of country gravel roads can provide a rich experience. What appears to be so destitute becomes alive when one "looks." Every time I take such a walk I find at least one or two new things of interest. The first day I see the obvious, the five or six kinds of wild flowers in the ditches and the small holes that ground squirrels and rodents live in. The next day, it is the tall cattails that catch my eye. I recall that parts are edible, so I decide to pull one up and take it with me. To my surprise, all I came up with is a shoe filled with water. The cattails grow in a "marshy" place and they are firmly fixed in the ground. I need a knife or glove to pull one up. Another day I notice the many different "weeds" growing in the ditch. I notice, too, the insect life abounding on these "weeds." I see a couple of feathers on the road. Nearby are some animal droppings. I also think I see skid marks. Could this be a story? I look for animal tracks and in the dust on the road I find several. Could a car have hit a bird during the night? Did a scavenger take the carrion for his meal? On other walks, hawks fly out of the weeds and circle me; black birds swoop at me, defending a nest I don't see. I discover large mounds of dirt beside freshly dug holes. Different times of the year tell different stories. I don't see these things from inside a car. I have become aware of all the "life" as I walk down the road.

Linda Nebbe

Part III

A Handbook

Introduction to the Handbook

The purpose of the Handbook is to give you some ways of putting nature therapy into practice. The material here is NOT exhaustive, but it is intended to be a catalyst for the development of your own techniques and ideas. References are given for more information in a specific area.

We had stopped to visit Mary many times, but she never seemed to know we were there. She just stared ahead and never said anything. Mary had Alzheimers disease. On one visit the social worker said she wanted us to spend more time with Mary, to work harder with her.

On the next visit, I had a big, homely puppy. It weighed almost fifteen pounds, was gray with all different colored spots, and had huge ears that seemed to belong to another dog. We stayed almost ten minutes with Mary. For nine and a half minutes this friendly puppy tried very hard to get Mary's attention and my arms were about to break! Then all of a sudden Mary looked at the puppy, long and hard. She put her arms around it and hugged it and said, "Grandma, I'm so glad you could come!" That was all.

After the visit, "Grandma" (that's what I named the puppy) and I told the social worker about Mary. "My gosh," she exclaimed, "that is the first time she has even said something that made sense. Oh, please keep working with her!"

On our next visit, a really cute puppy and I went into Mary's room. A nurse was there feeding her. "Oh, excuse me!" I said. "We will come back in a few minutes, after you are done eating!" It seemed like Mary glanced at me.

Ten minutes later the puppy and I went back to Mary's room. As we entered the room, Mary slowly looked up. She held out her arm and opened her hand. "Here, for the puppy!" She said. She held a handful of squashed vegetables! The puppy gobbled them up! Mary smiled.

Nebbe, 1987

Chad was of slight build for a second grader and so quiet he could almost be considered non-verbal. He was also usually alone. On a sociogram of the classroom, he had not been chosen. He was labeled LD and assigned to a resource room. I hoped to help him socialize by encouraging verbalization skills and finding ways to enhance his extremely low self-image. Talking to me was next to impossible for Chad. During the third visit, I was on the phone when he arrived, so he pulled up a chair in front of my aquarium and began a conversation with the fish. During that session and in many more to follow , he talked to the fish and through the fish. Soon I gave him the important job of feeding the fish on the days I was at another school. This job turned out to have a lot of prestige. Other children were begging him to choose them to help. Problems at home and with his brother were revealed through his conversations with the fish. With his parents' help , those problems were remedied. By the middle of his third grade year, Chad was chosen by all *the third grade boys on another classroom sociogram.*

Nebbe, in press

Brice was a twelve-year-old fifth grader. He was big for his age and prided himself on being "tough." In the middle of fifth grade, he was transferred to a school to become part of a learning disability class. Brice found his new placement undesirable and his transition was extremely rough. The teacher asked me to visit with him. On his first visit, Brice was silent. Tears welled up in his eyes several times. Finally , he told me he did not need to see "no counselor," I asked him to come one more time. The second time he did not come. When I went to get him he tried to avoid me. The session was completely unproductive. I told him he did not need to come any more. Then the teacher and I scheduled an "animal" guidance presentation in her classroom. Our hope was that the "animal" and the enthusiasm of the other children would make me less intimidating to Brice. My dog, Peter, was my helper during the planned guidance class. At the beginning of the guidance class, Brice was withdrawn, but as class continued he became part of the group and an active participant. We had no direct contact. Although our appointment had been canceled, the following week Brice was at my door at the time his appointment had previously been scheduled. When I greeted him, he responded with, "Is your dog here today?" With Peter's help, Brice and I have become good friends. In fact, on a recent survey of what he liked and did not like about school, Mrs. Nebbe's animals were his number one favorite!

Nebbe, *in press*

It was impossible to define the trigger that sent Rodney, a second grader, into a closed world of his own. He refused to speak to anyone, to do anything, or to move! After one of these "spells," the day was lost. It seemed impossible for him to recover. When this behavior occurred, the teacher moved him to the office. He remained there, not responding , for hours. No one, including me, seemed to be able to enter his world. One day Peter , my dog, was at school with me. The principal informed me Rodney was in the office again. Peter and I went in to see him. Rodney was sitting at a table with his head buried in his folded arms. Peter nosed Rodney's elbow. There was a pause. Then Rodney slid off his chair onto the floor beside Peter. His folded arms slid around his neck, and he buried his head into Peter's coat and sobbed. I waited, and Peter waited , sharing an occasional nose or lick with Rodney. Nearly ten minutes passed before Rodney looked up at me and smiled. I asked, "Can Peter walk back to class with you?" He nodded. The teacher reported the rest of the day went well.

Nebbe, in press

Chapter 8

Ways to Work with an Individual and Nature Therapy

This section focuses on working with an individual, although many of the techniques are adaptable to small or large groups. Some of the ideas may be redundant with ideas presented in Chapter 9. For ease of organization, the ideas have been presented twice, but with different emphases, examples, and form. Perhaps presenting different perspectives will further aid you in developing your own ideas. Examples in each of the three nature therapy areas are included for each technique. The techniques included in this chapter include, touch, gift giving, control, feeling expression, instruction, presence, observation, memories, loss, and talking.

Technique: Touch

Touching is essential for physical and mental health. According to Ashley Montagu (1986), deprivation of touch can be critical, even resulting in illness, extreme behavior disorder, or death.

Nature therapy offers avenues for touch experiences that are comfortable, acceptable, and non-threatening. Encourage as much touch and contact as possible. Guide or instruct the client to do some of the following.

Animal Assisted Therapy

Touch can be feeling: "Feel the warm fur, feel the soft dog, feel the wet nose."

Touch can be petting: "Here, let me help you pet him. He likes you to scratch him."

Touch can be loving: "Tell him how you feel. Pet him right here."

Touch can be pleasing: "Lets find out what he likes. There scratch him there; he loves it."

Touch can be brushing: Carry a small brush or comb and let the person groom the animal. Make sure the brush is soft, to prevent over zealous brushing! (Sometimes brushing can also be an expression of feeling.)

It may be a good idea to carry a soft brush and a harder brush. For those who express love and affection very gently, a soft brush may not be felt by the animal! For others with a harder stroke, a harder brush may be painful!

Horticulture Facilitated Therapy

Touch can be working with the dirt. Some clients may need ways to do this without getting dirty. To begin, an extension tool can be used.

Touch can be gently handling a plant for transplanting.

Touch can be weeding, cultivating, and pruning.

Natural Environment Facilitated Therapy

Touch can be directing the client to feel the parts of nature being explored, feeling the moss, the leaves, the bark.

Touch can be feeling the ground.

Touch can be woven with other senses, as feeling the warm sun or the wind, smelling the dirt or the conifer forest.

Technique: Gift Giving

Being socially conscientious and able to "give" to others is a characteristic of a mentally healthy person. One of Alfred Adler's therapeutic tasks is for the client to "give" (Corsini, 1979). For a person with low self-esteem, giving can be threatening and difficult. It is easier to give to an animal than a person. It is even easier to give to a plant or a place. Just the act of giving can often make a person

feel better, more worthwhile. In the act of giving, it is more important that the givers "perceive" they have given, rather than the importance of the actual gift. Nature therapy offers unique avenues for gift giving.

Animal Assisted Therapy

Taking care of the animal is giving. It may involve getting something to drink or eat for the animal, taking the animal outside to relieve himself, and making him more comfortable.

Teaching is a form of giving. Ask your client to help you teach the animal a trick. (Teach a trick whether the animal already knows the trick or not! Animals are capable of learning over and over.)

The animal can be used to give to others. Have a child draw a picture of the animal for a special friend, or send a card. Take the animal to "show" to someone else (e.g. parent, teacher).

Giving food (or sharing food) is a special kind of giving, a more personal kind of giving. Save or give a special goodie to the animal. Build a bird feeder.

Horticulture Facilitated Therapy

Giving can be watering, feeding, and caring for a plant. This works better on a long term basis when there is some ownership.

Giving can be transplanting a plant or growing one from seed.

Giving can be planting and growing a plant for a purpose, like a gift or for food.

Giving can be making the surroundings more pleasing.

Natural Environment Therapy

Giving is taking care of a special place, for example cleaning up or keeping trash cleaned up.

Giving can be writing letters to protect or to protest.

Giving can be adding to a special area by planting trees or building bird houses.

Technique: Control

Control is a nebulous concept which can refer to internal, or self-control, and external control. Magid and McKelvey, authors of *High Risk, Children Without A Conscience* (1988), listed psychopathic characteristics as marked control problems and manipulation tac-

tics. Glasser (1984) saw victims as people who perceive they have no control. People with strong self-esteem have self-control. Nature therapy offers a realistic basis for control therapy.

Animal Assisted Therapy

Have the client walk the animal on a leash.

Have the client throw a ball the animal can retrieve.

Having the client ask the animal to do tricks.

Have the client hold the leash and walk the animal while you push the wheelchair.

Allowing the animal to sleep on the floor or in the person's lap.

Have the client experience lack of control with an independent animal.

Horticulture Facilitated Therapy

Plant and grow anything that requires care for survival.

Learn to cope with the death of a plant, a situation that either resulted from lack of responsibility or in spite of an individual's efforts.

Natural Environment Therapy

Control can be writing letters that express opinions. This is especially powerful if there is a response.

Control can be the self-control which comes with the accomplishment of a physical feat like climbing a mountain or completing a long hike.

Control can be dealing with powers far greater than the individual while on a wilderness adventure trip.

Technique: Feelings

Traditional approaches to feeling therapy involve intellectual expression and nature therapy provides a variety of ways to illicit such expression. The client can identify or empathize with the feelings of the natural stimulus, transfer these feelings to the natural stimulus, or talk about feelings in respect to the natural stimulus. Discussion of feelings can be focused on an animal, a plant, a place, or the person. Nature therapy also provides a safe environment to open up and express the feelings.

Animal Assisted Therapy

Talk about how the animal is feeling.

Ask how the animal would feel if something happened or if the animal was in a certain situation.

Talk about how the person feels about the animal.

Compare the animal's and person's feelings: "Have you ever felt like that?" or "You feel the same way!"

Sometimes clients will tell you how they feel by telling you how the animal is feeling. (An example would be the care facility resident telling you, " He wants to get out of here!" or "He is so tired!" in reference to the dog. Another example would be the child telling you, "He is afraid someone will hurt him!"

Sometimes the client will identify with the animal.

For example: A boy raised his hand to ask a question when the counselor brought a dog to the child's class.

The boy asked, "Is Peter afraid of anything?"

The counselor answer, "Yes, he is afraid if I leave him alone in my office."

Later that boy came to the counselor's office and the following conversation took place.

Counselor:	Hi. Did you want to see me?
Boy:	Yeah.
Counselor:	Was there something special?
Boy:	Yeah. I wanted to talk about your dog.
Counselor:	About Peter? OK! What did you want to talk about?
Boy:	Well, you know that problem he has? I have the same thing.
Counselor:	Let me see, what problem is that?
Boy:	You know. What you said yesterday, about being alone.
Counselor:	You mean, feeling scared when he is left alone.
Boy:	Yeah.

The counselor eventually learned the boy was an only child of eight years. He spent every afternoon and night after school home

alone. He was so frightened and lonely he would hide under the table and sometimes even sleep there. He had never told anyone about his fear and loneliness.

Another example is talking about death. When this is very difficult for a client to talk about, it can be easier if first transferred to the death of an animal or plant.

Horticulture Facilitated Therapy

Feelings can be transferred to a plant in the same way they are transferred to an animal. "The plant is lonely: it needs someone to take care of it." (See the story on page 63).

Natural Environment Therapy

Feelings can be talked about in connection with experiences. Feelings can be transferred to natural stimuli.

Technique: Instruction

When lack of knowledge leaves a person feeling afraid or insecure, instruction can be therapy. For example, teaching a child how to "read" or understand a dog's language, how to approach a dog and how to pet a dog, and how to know if a dog is going to bite or not. All of these things give children or adults self-confidence and more control over their world. Likewise, teaching people survival skills in a wilderness environment empower those people. They have more confidence with the knowledge that they are not victims but persons with choices and control over what happens to them. With more control and understanding people have more confidence and higher self-worth.

Animal Assisted Therapy

Teaching a client how to train an animal. (For an example, see the Humane Society Project, page 215.)

Simple instructions like, "Here, pet him here. He likes that," give a person confidence within the situation.

Horticulture Facilitated Therapy

Learning how to do something and then doing it is a satisfying accomplishment.

Natural Environment Therapy

Learning survival skills is empowering.

Learning about natural phenomena is empowering.

Technique: Presence

Simply being in the presence of the natural environment can be renewing and revitalizing.

James Swan (1977) pointed out the possibility of exchange of life energy forces among all living things. Rene Dubos talked of the spirit of a place (1972).

The presence of the natural stimuli itself is therapeutic. Being in contact with nature may help the client relax or become stimulated. A walk through the garden, sitting on one's porch and watching the clouds, petting a puppy, all these experiences can make a person feel good.

A run or a walk during a storm could be physically stimulating.

Animal Assisted Therapy

The presence of an animal has been reported to relax clients and increase responses.

Horticulture Facilitated Therapy

A walk through the garden or smelling and looking at the beautiful flowers may be therapeutic.

The presence of plants in an office establishes the atmosphere.

Natural Environment Therapy

Just being surrounded by a peaceful natural environment can be relaxing and energizing.

A cold, whipping wind chills and stimulates.

Technique: Observation

We can learn from observing. We can see what another cannot tell us. Opportunities for observation in all three areas of nature therapy may speak louder than a guiding therapist. This is one instance where the therapy belongs to the therapeutic media.

Animal Assisted Therapy

Observe the animal. Watch it play, sleep, or interact with another animal.

A boy who came to counseling for his aggressive behavior with other children watched the fish in the counselor's aquarium. One of the fish was always "sucking" on the other fish. The boy asked a lot of questions about that fish. "What's he doing?" "Do the other

fish like him?" (Answer, "Watch, what do you think?" His answer, "NO!") On the third visit the fish was no longer there. Again, a lot of questions.

Boy: Where is he?

Counselor: I took him out; he's at my home.

Boy: Does he ever get to come back?

Counselor: Well, I thought I would keep him out for a while then try him again.

Boy: What if he still does it?

Counselor: Then he will just have to be alone, I guess.

The fish came back, still picked on the others, so left again. The boy's teacher said there was a marked decrease in his aggressive play with other children.

Sitting and watching is a special skill of its own. It also gives many opportunities for reflection. When observing the interaction, people tend to identify or read into the behaviors. In a group, when behavior is observed it can be understood when explained by a knowledgeable observer. From this discussion can come a discussion of social behavior of people, thus further personalizing understanding.

Horticulture Facilitated Therapy

Observation of plant life may have to occur over a period of time, but results can be powerful.

Sometimes the observation is of others working in the media, like watching loving and gentle people work with plants they love.

Natural Environment Therapy

If we sit quietly in a natural area for fifteen or twenty minutes, the natural occupants of that area become use to our presence. Then we may observe, as part of nature, what takes place all around us.

Technique: Memories and Life Experiences

Everyone likes to talk about their favorite things, especially when someone is really listening! Almost everyone has an animal or pet tale, a garden story, an environmental adventure, a fantasy to share, or even a truth or confession to make. Storytelling is an important part of every culture's heritage as well as an important

method of passing on cultural mores and values. Such sharing is to be encouraged with interested and caring listening!

Recollecting and reworking memories of former experiences can be therapeutic.

Animal Assisted Therapy

An example: The woman in the nursing home always said she hated cats. One day the volunteer brought a white cat. The woman asked to see it and put it on her lap. Then the woman began sobbing and told how cruel she had been to her daughter's white cat and how the cat hated her. From then on she requested that the animals be brought to visit her. A couple of weeks after the incident, her daughter shared with the social worker of the nursing home how much more pleasant her mother had been to her (Nebbe, 1987).

When speaking to a large group about animals, begin by asking everyone who has had a special pet to close their eyes and remember a special time or special things about that pet. Watching the response of the audience can be amazing. Faces turn from frowns to smiles. Ridged bodies relax. Even the memory of a special pet is powerful.

Horticulture Facilitated Therapy

We need only to listen to gardeners tell about their gardens to know how special they are!

Natural Environment Therapy

The feelings from natural experiences return when remembered. So does the pride and the empowerment!

Technique: Talking

Traditional therapy is represented by clients talking about their feelings, experiences, and problems. The listener is usually the therapist or counselor. Just talking, however, to someone or to no one, can also help an individual to clarify thoughts and express feelings.

The accepting and confidential ears of animals, plants, and the natural environment can also provide a therapeutic listener.

Animal Assisted Therapy

Dr. Janet Ruckert wrote *The Four-footed Therapist* (1987). Her book includes exercises designed for the client or clients to talk to their pet about feelings, experiences, or problems.

Horticulture Therapy

The story on page 63 illustrates a client talking to a plant.

Natural Environment Therapy

Another book, *Meet My Psychiatrist* by Les Blacklock (1977), specifically told about that authors continuing conversation with nature.

Technique: Dealing with Loss

Loss is change. All that lives, changes and dies in the natural process. Loss can be traumatic and to some debilitating. By experiencing little losses and small changes individuals learn that loss is all right, that the hurt eventually subsides, and that life continues. Nature therapy allows for loss to be experienced and for an opportunity to express grief. Nature therapy also teaches about the continuing and connected cycle of life. Experiencing loss, talking about loss in various ways, aids clients as they search for their own identity and their own views of mortality.

Animal Assisted Therapy

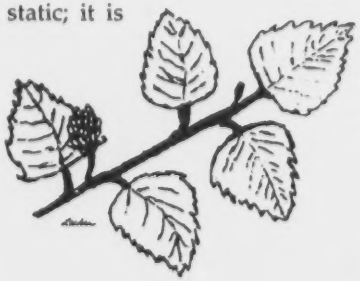
Goldfish get sick and die. Pets are faced with illness and death.

Horticulture Facilitated Therapy

The process of the cycle of life moves quickly and is visible.

Natural Environment Therapy

The environment is never static; it is always changing.



Chapter 9

Group Techniques

In the previous chapter, we reported techniques to be used when a you work one-on-one with another individual. Although the techniques are aimed at one on one interaction. It is obvious that these techniques can also be adapted to a small group or larger group in many cases. Likewise, the techniques in this chapter intended for larger groups can be adapted to individuals or small groups.

The words "education" and "therapy" in this chapter are use synonymously. Education, here, is empowering, but also intended to influence feelings, thinking, and reasoning. Techniques discussed will encourage clients to personalize the information, develop or recognize values about animals and nature, make commitments based on those values, and take action on those commitments.

Technique 1: Attention Span

Work with an awareness of the average attention span of your audience. Average attention span is from ten to twenty minutes; children's is nearer to ten minutes, adults closer to twenty minutes.

Example: As you speak, change your method of presentation or utilize different techniques often to keep the attention of your audience. If you notice your audience is losing its focus, change to another technique or subject.

Technique 2: Understand your audience developmentally.

Good teaching recognizes a person's developmental abilities.

Example: Children naturally tend to identify with animals and natural things; in fact, they see animals as peers. However, our culture sends mixed messages about animals. In children's books or movies, animals are often given human characteristics, yet cultural expectations are for children to view animals as commodities or things. A sound understanding of child development and development of thinking skills will allow you to accept the peer identity children have for the earth. Allowing this identity will enable children to "feel" and to "empathize" with all living things, including people. As children continue to develop, they will then be able to gain a responsible environmental ethic based on feelings and information. In other words, it is all right for children to anthropomorphize (give human characteristics to) animals and natural things. As with children's belief in fairy tales, the process of natural development will evolve into understanding.

Technique 3: Compare information you are giving with information the audience already knows.

When you share new information, try to relate it to information the audience already knows.

Example: When teaching the "four reasons why an animal bites," relate each of them to the listener's own experiences of danger and anger.

1. Animals bite when protecting themselves, and when they feel in danger. How do you feel when another person corners you and you think that person is going to hurt you? Do you try to run? Do you scream? Do you fight? Animals will protect themselves.
2. Animals bite when they are protecting their young. Ask a group of children, what would your parents do if someone tried to hurt you? (In some groups, this analogy does not work. Know your group!) Or, ask a group of parents what they would do if someone tried to hurt their child.
3. Animals bite when they are protecting their food. How many of you have ever been ready to eat something really wonderful, something that is your favorite, something you have looked forward to for a long time, and it fell on the ground or was taken

by a brother, sister, or dog? (Many raise their hands, this is an example of the technique active participation!) Then ask, "How did you feel?"

4. Animals bite when they are injured or ill. How many of you feel grumpy when you are sick or hurt? (Another example of active participation.) How many of you have parents or teachers who act grumpy when they are sick or hurt? Imagine how confused animals feel when they are hurt!

Technique 4: The more meaningful the information is to the listener, the easier it is for the listener to learn.

First, talk in a language that your audience understands. Secondly, simplify more complex concepts. Finally, relate your information to something familiar to the listener. It will be even more meaningful.

Example: There are four main reasons animals bite. (Simplifying concept.) The first is if they are scared or feel someone is trying to hurt them. (Language understood by even very young children.) Close your eyes for a minute and imagine that it is late at night and you are walking home from a friend's home all by yourself. All of a sudden you hear footsteps behind you. Then, suddenly, someone grabs you! How do you feel? What would you do? (Relating information to the child's experience level). (This is also an example of a fantasy experience, Technique 6.)

Example: The project assigned a group of second graders was to mulch a hundred newly planted trees. The students had been taught the mulch was to add nutrients to the soil and to protect the roots of the trees from cold or dry weather. The day the project was to be carried out was an extremely nasty fall day. In an effort to relate to this information, the students worked hard in the unpleasant weather to keep the trees warm and to feed them.

Technique 5: Use visual aids such as pictures, paraphernalia, animals, and charts to help the audience visualize your information.

People learn in different ways. Some are visual, some are auditory, some relate to concrete information and some to abstract ideas. Hemispheric psychology, defined the right and left brain activity and dominance (Blakesless, 1980). Neuro Linguistic Programming described sensory components of learning, learning

visually, auditorily, or through feeling (Saltmarsh, 1983). Well prepared visual aids are an important part of a good presentation. Show and tell the important aspects of your presentation. When giving reasons, give concrete facts and abstract reasoning. Show slides and display charts, write on an overhead or chalkboard.

Example: As you are talking about the four reasons an animal bites, show a chart with each reason written on it, illustrated.

Technique 6: Involve the participants with the use of their imagination through "fantasy experiences" or guided imagery.

In these techniques, ask your audience to imagine certain things happening.

Example: Ask your audience to "close their eyes and imagine" as you narrate a guided imaginary experience. For example, when teaching that wild animals do not make good pets reasons include (a) it is illegal, (b) it is difficult, (c) it is dangerous, and (d) the animals are not content. For (d), the animals are not content, say, "Close your eyes and imagine you and your family are on a picnic. You are playing ball and the ball goes way out of bounds, over a little hill just out of sight. You go after it. Just as you are picking it up, a very large creature, many times your size, comes up to you and scoops you up. The monster is very gentle and is talking to you, but you can not understand a word he says! He carries you off with him to a place, a land, filled with creatures just like him! He shows you to all of the others. They are nice and gentle and seem to enjoy looking at you. Then they lock you into a room. There is a soft bed for you, a ball, and some other things with which to play. Each day they bring you food to eat. It is strange to you but tastes okay. Every now and then they come and look at you and feel you. Sometimes they put a rope around you and take you out. The tie you to tree branch by a long rope and push you. That is kind of fun. They throw balls at you. Sometimes they even throw you into a large tub of warm water! Its obvious they really like you and you even like them. Pretty soon, though, you realize that you will be there forever. You will never see your family or others of your kind again! You will never even be able to talk to another person again, because you can not understand what these creatures are saying. Do not open your eyes yet, but first think about how you are feeling when you realize that you are here forever, caged, in prison! (Pause.) Now you can open your eyes and tell me how you feel. What are you going to do?"

The children will tell you they are unhappy, sad, and they will try anything to get out. Draw comparisons with the way wild animals feel when they are captured and kept in a cage.

Technique 7: Use a demonstration.

Showing your audience amplifies the information you are sharing. More of the group will understand if they can see, as well as hear, what you are telling about.

Example: Tell the audience what you want them to do, then demonstrate by doing it yourself.

Say, "I want each of you to look closely at your leaf, get to know it, and then we will take turns introducing our leaves to the rest of the group. I will introduce my leaf first." Look at your leaf closely, then introduce your leaf. You have demonstrated what you want the audience to do.

Technique 8: Allow individuals in the audience to sense and feel what is being learned.

Involve as many senses and experiences as possible: touch, hearing, seeing, observing, experiencing.

Example: Touch the ground, the leaves, the tree, the dog, the thorns. Whenever possible, touch. Guide the touch, suggesting ways to touch: First, touch with your fingers, then your whole palm. Run your hand up and down. Feel the warmth, the softness, the texture.

Example: Use directed listening to help participants hear. If you are working with an animal, point out the sounds the animal makes. Ask the audience to be quiet and listen for certain sounds. "Do you hear the purring?"

Ask the audience what the sounds might mean, or tell them if you know.

Give the audience an assignment of "listening" for sounds when they are outside. Tell them to stand very still and listen. If you have time and opportunity, you might take the group outside and try this. (Certain times of day work best. Early morning is filled with sounds. The middle of the afternoon is usually quiet.)

Ask what sounds the participants have heard a squirrel make. They might be surprised how many they know. This could be the basis of a discussion about the reason sounds are important to animals.

Example: If there is an odor, call your audience's attention to it.

Example: "Guided seeing" is the act of guiding the participants through the examination of something they are looking at using modalities of vision (texture, color pattern, shape, size, movement and so forth) to point out things you want your viewers to see. With a raccoon direct them to look at the hands, the body build, the gate, the mask, the coloration, the patterns, the textures.

Example: Observation is a skill involving seeing and analyzing patterns. Observation takes time, but the rewards are worth the effort. Depending on the therapeutic media with which you are working, if possible, have the participants just sit and observe. Some observation possibilities might include fish in an aquarium, birds at a bird feeder, squirrels playing, puppies playing. Analyze what is happening. Ask, "What do you think is happening?" or "Do you suppose that_____?"

Example: Have the participants try to experience what it is like to be an animal, a tree, or a piece of grass.

In a discussion of a raccoon or squirrel, you might look closely at the "hands."

Then ask the participants to tape or hold their thumbs next to their index fingers and pick up a pencil or other object to experience what the dexterity of those animals is like.

Another exercise is to "become" as small as an animal and look at the world from that point of view. If the animal is a tree dweller and you can position your participants up in a tree, have them imagine the world from that point of view. Van Matre uses the bosun chair, a rope on a pulley with a tire or chair for the person to sit on to be pulled up into a tree (Van Matre, 1972). If you are studying raptors, use a pair of binoculars to talk about and compare human vision with the animals.

Technique 9: Actively involve the participants.

Active involvement insures participant's attention and gives them a feeling of being directly related to the activity.

Example: Conduct a hand-waving vote and ask the audience to raise their hands in answer to your questions or requests. Ask the audience to answer you with thumbs up (yes), thumbs down (no) to a series of questions. Ask your audience to close their eyes and imagine.

Example: Allow individuals an opportunity to share points of view, thoughts, or experiences with their audience neighbor. Often, particularly with children, they all have stories they want to tell. If there is not time to field some of these stories, ask the participants to take a moment and tell the person sitting next to them about it. Some organization may be necessary with this technique, like counting 1,2,1,2, and having ones share with the two next to them.

Another use for sharing might be in "practicing" information (technique). Say, "Tell your neighbor right now why you should not keep a wild animal as a pet." "Now have your neighbor tell you what you should do if you find an orphaned or injured wild animal."

Technique 10: Use role playing with your participants.

Role playing is the acting out of perspectives, thoughts, and feelings of others.

Example: Role playing can be used as an illustrative technique, or to practice or repeat information. In your presentation, you might ask eager role players to "show" what they would do if they found a small baby animal that appears to be an orphan. Role playing takes time. Be sure it is the wisest use of your time.

Role playing can also be used spontaneously by you with the participants. To teach that wild animals are not vicious, but that they only bite to protect themselves, use a role play with you and one child. Involve the others by asking them to "imagine" with you. Tell your helper to look straight ahead. Stand behind that person and then say, "Imagine that it is a dark night. You are on your way home, alone, from a scary movie. Suddenly you hear footsteps behind you, (do this in a dramatic way) coming closer and closer. . .suddenly someone grabs you." (At this time, put your hands around the child's waist.) Almost always the child at least gasps or jumps. Then ask, "What would you do? Scream? Run? Kick? Bite?" Then draw comparisons between what they would do and what animals do when they are afraid of someone.

Technique 11: Ask the participants for a promise or commitment.

A promise or commitment to undertake a specific responsibility helps increase personal identity with the material.

Example: Write a letter expressing a concern, tell another person about what was learned. Even the promise to "never forget" or to put a leaf in a special place are commitments. If there is not an opportunity for a personal commitment from everyone, have them write it or sign a contract (double copies), or simply have everyone willing to "promise" raise their hands.

Technique 12: Provide a positive role model for your audience.

Children learn from copying certain significant adults who are role models.

Example: In this case, be what you teach. If you are kind and feeling with the animals or plants, the participants (principally, the children) will follow that example. If you are harsh, they will copy that. If you litter, they will follow suit.

To have a positive influence, a role model's actions must be consistent with one's words. You must be able to act and verbalize your positive feelings toward the animals and the environment (Malcarne, 1983).

Technique 13: Use stories and case studies as examples.

Stories are a effective tool in teaching children about animals. A story is a method of allowing the audience to participate vicariously in an actual experience.

Example: Ministers learn that one of the best tools of their trade is "witnessing," or telling their actual, true experiences. Likewise, in teaching, the true story is a powerful tool. Tell true stories or stories that could be true, sometimes adapting them to fit the audience. Stories can be told, read, or shown. Each method can be very effective. The feeling tone connected to funny or sad stories is effective. (See technique 17.)

Technique 14: Practice increases learning.

As much as possible within your presentation ask for "practice" or recall.

Example: Do this by asking questions or reviewing.

Ask, "Tell me what the most important reason is that you should not keep a wild animal as a pet?"

The group responds, "Because the animal is unhappy."

You ask, "Tell me again, what the most important reason is that you should not keep a wild animal as a pet?"

The group responds again, "Because the animal is unhappy."

Leave your group with a handout and the "charge" to take it home and share it with family members. This may encourage individuals to "practice" again later and thus, remember better.

Technique 15: Place the most important items at the beginning or end of your lesson or presentation.

Assuming all parts of a task are of equal difficulty, those placed first in your presentation are easiest to learn. The second most important position is the last.

Example: You may want to begin, "If you only remember one thing I tell you today, remember...." as your introduction. An introduction with a story that has an important point will be remembered.

You may want to finish with a review of your important points. Ask the participants to read them (active participation) off a chart with you (visual learning,) or repeat after you the important points you want the audience to remember

Technique 16: Use vividness to revive the attending participants' behavior.

In advertising, certain words stand out in bright colors. Someone suddenly sneezing is noticeable in a library. Vividness means contrast, something that stands out. Vividness causes an alerting activity in the brain.

Example: Pace change, position change, a visual, all create "vividness." Suddenly saying, "Stop. Close your eyes. Now imagine.... " Say dramatically, **"Listen, this is very important!"**

Technique 17: Use a feeling tone to enhance retention.

If there is an emotional tone to the presentation, material, or situation, it will be better remembered. A pleasant or excited feeling tone is best; an unpleasant tone is second best; and a neutral tone lastly used. People most often seek a pleasant feeling tone.

Example: Your attitude and enthusiasm are the first step in developing a pleasant feeling tone. An unpleasant feeling tone, such as sadness, may be desired if you want your audience to "empathize" with a character in a sad story.

Van Matre believed that if participants are going to learn to love nature, it is important that they enjoy the activities that take place outdoors. He cautioned that if it is raining and miserable out, it may be better to reschedule an outdoor experience (1972). The level of experience and the motivation of the group is important, as well as the leader's goals.

Laughter provides a very positive feeling tone.

Technique 18: Structure the lesson or presentation so it is a successful experience.

Participants experiencing success learn better. Their experience with you needs to be successful.

Example: If you plan and present an interesting presentation, you and your audience will feel successful. If you are in control and problems are dealt with, you and your audience will feel successful. If you use active participation techniques and good learning techniques, participants will feel successful.

Technique 19: Use positive reinforcement to encourage desired behavior.

Positive reinforcement will strengthen the behavior it follows. Positive reinforcement throughout your presentation will make your audience more receptive and more attentive!

Example: Tell the participants that they are good listeners, that you really appreciate their interest, and that you really enjoyed being there to share. A comment like "WOW! You guys all got that right!" or "You really know your stuff!" is positive reinforcement.

Technique 20: Limit your material.

For efficiency in learning, work with the smallest amount of information possible without sacrificing meaning or wasting time. Do not try to overload your audience with too much information. Good planning is important, so share things that are important.

Example: Define specifically what you want the listener to know and plan your presentation based on that knowledge.

Chapter 10

Guidance and Teaching Activities

The possibilities for experiences and activities in the area of nature therapy are endless. Following are some examples as well as references for finding more ideas.

The following experiences are just the beginning of a long process. When we enter a new environment, there is much adjusting to do. The first activity will not be instant magic, but as your clients develop the ability to be "aware" of the nature that surrounds them, they will begin to feel the oneness, the relationship that exists between people and their natural heritage and a "healing" process will occur. The experiences you offer here are "lessons" in becoming "aware." When that therapy takes place depends on the individuals, their level of awareness, their relationship with the natural environment, and the "therapist" or teacher.

These experiences are merely stepping stones to a larger awareness. As you use them, many more ideas will come to mind. Do not hesitate to repeat experiences—nature is never the same twice, and our "awareness," so used to being entertained, needs practice to be able to "see" and "to hear" and "to feel."

Goals for the activities include:

The client or student will be able to:

1. See the usefulness in every living thing
2. Become aware of the natural environment
3. Understand themselves and others better

4. Find opportunities for constructive decision making
5. Understand the unity of life, the interrelationship of all living things
6. Enhance self-esteem and personal worth (everyone and everything is important and special)
7. Better understand the "self" as we perceive it and as others do
8. Understand themselves and their own growth and care needed to live
9. Become more perceptive
10. Become more sensitive
11. Develop healthy concepts of natural processes, birth, growth, life, and death
12. Find opportunities for projection and introspection
13. Find opportunity for self-expression
14. Vent feelings of anger, frustration, joy, and so forth
15. Enhance self-actualization
16. Build trust, confidence, and rapport
17. Have an opportunity to act on their values

The activity goals will also include:

1. Encourage a feeling of self-worth through accomplishment
2. Encourage responsibly
3. Develop interests, avocations, hobbies, and careers
4. Create some peer respect for achievements
5. Heighten one's use of senses
6. Encourage the development of empathy and understanding
7. Enhance communication skills
8. Enhance our self-confidence
9. Aid in developing one's identity

The purpose of including these activities is twofold. First, to illustrate what has already been discussed in this book. Second, to present ideas ready for implementation.

These experiences are written as "lesson plans" in a structured format. Each may be executed as formally or informally as you choose. Lots of ideas are included with each lesson, probably more than are needed. The lessons are written as though being presented to a group. Adapting them to use with individuals is up to you.

Experiences are organized into sections, Animal Activities, Horticulture Activities, and Environmental Activities. The best section for each experience was selected, although most of the experiences fit easily into two or all of the sections.

Activity 1—Animal
Adaptations

Objectives

Humans are the most adaptable living creatures. Through the awareness of the adaptations of other living things, you can become more aware of your own possibilities.

Setting

Any place

Materials

Pictures of living animals with obvious adaptations. You will need at least one picture for each pair of participants if you are doing this with a group. Include animals and plants.

Special Considerations

Time: 20 to 30 minutes

Group size: Individuals or groups

Adaptation: "Adjustment to environmental conditions, modification of an animal or plant or of its parts or organs fitting it more perfectly for existence under the conditions of its environment."

Process

Have the group members look at their picture and list the adaptations for each animal and tell how that adaptation helps the animal to survive.

Examples:

- Squirrel—a long tail helps squirrels stay balanced when jumping through the air.
- Frog—bulging eyes on the side of the head help frogs see ahead, behind, or above; long back legs help frogs jump—a frog's coloring protects it.
- Nestlings gapping—bright red mouths help parents put food where it is needed.
- Hawk—hooked beak helps it tear up meat.

- Raspberries—juicy fruits that taste good help attract animals who will eat the raspberries and spread the seeds.
- Milkweed—pods with silky parachutes spread seeds; the bitter tasting milky juice keeps animals from eating it

Interaction: Understanding

- What adaptations did you find? How do they help the animal or plant?
- What adaptations do people have? How do these help? Examples: standing up straight, skin color. (Originally dark-colored skin developed in hot, tropical areas where the dark pigment was needed for protection from the sun.)
- What are behavioral adaptations? (List examples of how people can change their behavior to adapt to different situations. Examples: sitting and being quiet in class, cheering at a game, putting on a sweater when cold, or adapting language depending on with whom you are talking.)

Interaction: Personalization

- Think specifically of your own situation and examples of adaptations that you have made. How did they help or hurt you?
- Think of a specific situation that you have from time to time that is uncomfortable. Are there any adaptations that you can make to create a better situation?

Additional Activities

See "Create a Critter," page 109.

Activity 2—Animal
Going Wild

Objectives

Through empathically becoming another, the participants can learn more about themselves and their perceptions of others, thus becoming more sensitive to themselves and others. This activity gives participants opportunities to practice empathy.

Setting

Outside is a little better, but the activity can be done inside.

Materials

None

Special Considerations

Time: 15 to 30 minutes

Group size: One or many

Process

Have the group spread out around you. Ask each individual to choose a wild animal, preferably a ground dwelling animal. (If they choose an animal that dwells elsewhere, they need to consider it from the ground point of view.) Ask the individuals to become the animals in their imaginations.

- Consider the animal's size: If your animal is much shorter than you, become short. Look at things from this perspective, the way that animal would look at you. (Crawling, laying on the ground.) How is this different from you?
- Consider the animal's sight: Probably your animal does not see as you do. This animal might see only in black and white. Squint so everything is blurred. Look for movement, not things. Maybe your animal sees much better than you. Imagine you have super vision.
- Consider hearing: Most animals can hear very well. They have large external ears that catch sound. Put your hand in a cupped position around your ear and turn your head in different directions. See if there is a difference in the sounds you hear. Try

putting your ear to the ground and listening for vibrations. Be very still and extend your ability to hear all available sounds. Some animals can hear sounds that humans cannot.

- Consider your home: Find or imagine the place that is home to you as the animal you have chosen to be. What would you need to be comfortable there? How could you make the temperature comfortable? How can you keep yourself safe from predators?
- Consider your food: What would you eat? Where would you find it? How would you find it?
- Consider your safety: What dangers do you face? How will you protect yourself?

Become you again and discuss what you have learned.

Interaction: Understanding

- What did you discover or learn about your chosen animal?
- Did the world look different from that animal's point of view? How?

Interaction: Personalization

- Now think of yourself as another person, someone very small or very tall. Think of yourself as someone handicapped, or fast, or shy, or hungry, or afraid. Share who you have chosen.
- How is the world different to them than it is to you?

Activity 3—Animal
Create a Critter

Objectives

Through the experience of creating an animal that needs to fit or be adapted to a specific environment, participants will focus on uniqueness and adaptability. This will help participants better understand their own uniqueness and adaptability.

Setting

Indoors and outdoors. Although the "critter" may be created indoors, an available outdoor area will enrich the concepts in this activity by adding another dimension.

Materials

- Potatoes, one for each participant. They can be old, crinkly, and even have growths sprouting.
- Potpourri of natural objects, small pebbles, sticks, crumbly leaves. ***Do not destroy living things to collect these objects.*** Collect things already on the ground and return them when finished if appropriate. (A potpourri of "garbage" could also be "recycled" for building the critter.)

Special Considerations

Time: 30 minutes for explanation and construction; 30 minutes for sharing, hiding, and hunting

Group size: Individuals or small groups can work on their "critter"

Process

- Talk about how animals are adapted to their surroundings. List some examples of animal adaptations. Examples:
  - Raccoon's masks are black and cover their eyes so their prey cannot see the raccoon's eyes.
  - Bobcats have hair growing on the back of their ears that resembles eyes. To their predators, the hair looks like eyes in the back of their head.
  - Birds have wings and can fly.
  - Owls have very large eyes and exceptionally good sight.

- See the exercise on "adaptations" (Activity 1) for more examples.
- Assign individual participants a habitat and then instruct them to design an animal that would live in that habitat and be adapted to it. Habitats might include: high in a tree, the prairie, underground, water, mixed habitat, and so forth.
- Ask participants to construct their animals using the potato and collected objects. Develop an explanation for their critters and name them.
- Display the critters in their habitats.

Interaction: Understanding

- What are adaptations?
- What is habitat?
- What are some examples of adaptations?

Interaction: Personalization

- What is your critter?
- What adaptations does your critter have that makes your critter suitable for the environment?
- What is your critter's name?
- What are your critter's life habits?
- What is your habitat?
- What adaptations have you made to be suitable for this habitat?
- What would you like your habitat to be?
- What adaptations would be necessary for you to live there?

Additional Activities

- Have the participants divide into teams, hide their critters within their team territory, then switch territories and search for the other team's critters. Any critter not found is a winner!

Activity 4—Animal
The Nest

Objectives

- Participants will be able to tell how a bird's nest is composed.
- Participants will be able to tell what materials compose a bird's nest.
- Participants will recognize the wonder of this "natural" phenomenon.
- Participants will draw a parallel between the special "talent" of birds and special things that they can do.

Setting

Outside is best, but the activity can work well inside.

Materials

Birds nests, one per 4 or 5 participants. (One nest per group will also work.) Newspaper.

Special Considerations

Time: 30 minutes
Group size: One or more

(***Never take a nest or home of any animal out of the natural habitat.*** Possession of birds' nests is illegal. Before you collect nests or use this activity, check with a Conservation Officer. Usually a Conservation Officer will be able to give you permission. ***Be sure to tell participants that possession of birds' nests or feathers or any part of a wild animal is illegal. They should not collect or possess birds' nests.*** Any nests collected should be picked up from the ground, collected from felled trees or gutters, or collected in the fall after the birds have flown south. When you collect a nest, put it into a large brown paper bag and spray it carefully with a commercial insecticide. Store the nest in the paper bag in a safe place.)

Process

Have the participants look at the nests, noting differences (if more than one nest is used), materials used, construction, size, shape, and so forth. Have each group cooperate in carefully taking apart one of the nests. Look for:

- Construction patterns (mud on the bottom, woven or cemented together, layers, and so forth)

- How each nest is made to protect young
- Interesting things found in the nest
- Evidence of the birds' lifestyle (food bits, materials)

If more than one group is involved, have the groups share briefly what they have found. Information to share:

- It takes a bird two to eight days to build a nest. Some birds build two or three nests per summer.
- The birds use their beaks and feet to build their nests.
- Some birds use a nest once, some use their nest year after year.
- The nest of the bald eagle may weigh up to 2,000 pounds.
- Some birds build no nests.
- Some birds lay their eggs in another bird's nest.

When the discussion is finished, tell the groups: "Now that you have taken your nest apart, I want you to put it back together just like it was!"

Interaction: Understanding

- What did you find composed the nest?
- How did the bird get the nest together?
- How do you suppose the bird did this?
- Could you make a nest like this?

Interaction: Personalization

- How did you feel when you were asked to put the nest back together?
- Think about your own body. What things can you do that are very special, that other animals cannot do? That other people cannot do as well?

Additional Activities

Focus on the individual's talents and gifts. Using natural materials (objects found on the ground—do not take from living things or destroy homes and habitat) make a sculpture which symbolizes the individual's talents, possessed or wished for.

Have an individual sit in the center of the circle and have others in the group say one thing they consider a "talent" of that individual. This can be done in writing, also.

Have the individuals make a written list of "talents" and wonders about themselves. Help with this, if necessary, by doing some general "talents" as a group. (For example, ability to write or read.)

Activity 5—Animal
Observation

Objectives

- Participants will be able to demonstrate how to sit and observe.
- Participants will be able to tell what they have observed.
- Participants will be able to draw some conclusions about what the animal is feeling or doing by "empathizing" with the animal.
- Participants will be able to draw some parallel between what they perceive they saw and their own experiences or lives.

Setting

Wherever an observation can take place. This activity may have to be done spontaneously, when something is available to "observe."

Materials

Some animal or animals to observe:

- the classroom hamster
- an animal learning
- birds at a feeder
- parents caring for their young
- squirrels seen on a walk
- animals eating
- ducks on a pond
- kittens playing

If the actual behavior of animals is not available, pictures of animals can be observed and interpreted.

Special Considerations

Time: About 20 minutes

Group size: One or group of any size

Process

Teach children how to observe by "guiding" their observations with things to see.

Instruct the observers to sit quietly so their movements do not distract the animal.

- What is the animal's behavior?
- What causes the behavior?
- What senses are the animal using (taste, smell, hearing, sight)?
- What is the animal feeling?
- What cues to feelings or behavior do you see? (growling, running, ears back)

Have individuals share what they have observed.

Interaction: Understanding

- What did the individuals see happening?
- What did the animal do?
- What caused the behavior?
- What senses did the animal use (taste, smell, hearing, sight)?
- What was the animal feeling?
- How could you tell?
- What if _____ had happened? How would that have affected the situation?

Interaction: Personalization

- Have they ever been in a situation like that?
- Have they ever felt that way?

(In this activity, much of the personalization occurs in the analysis part of understanding. Individuals will "read" their own behavior and interpretation into the animal's behaviors and feelings whether it is what truly is happening or not.)

Additional Activities

Ask the individuals to "observe" on their own. Share observations with journal entries, writing, or sharing.

Activity 6—Animal

The Butterfly Tree

Objectives

- Participants will be able to explain metamorphosis because they have seen it happen.
- Participants will be able to demonstrate observation skills.

Setting

Inside during the appropriate season for the butterfly to form and emerge from a cocoon.

Materials

- A cage-like structure to put the branches and plants inside, an aquarium with a screen on top, or a large cardboard box with a net on the top frame covered with netting
- The plant with the cocoon can remain uncaged within an office with a window so the emerging butterfly can eventually fly out with out damaging itself.
- Cocoon (find one already formed or look for a caterpillar)
- Appropriate plant or plants
- A "do not touch" sign

Special Considerations

Time: Period of time, days or weeks
Group size: Any number

It is important that no one touch the cocoon. You may need to consult a naturalist in your area for "cocoon" hunting territory and recommendations on what kind to find.

A good cocoon to use is that of the monarch butterfly. Toward the end of summer (time depends on the climate and location), the caterpillar can be found feasting on the milkweed where it will form its cocoon. Pick the whole plant and move it indoors.

Process

- After a caterpillar or cocoon has been located, bring it into your office or room. Duplicate the conditions of the environment where the cocoon was found (sunshine, air, plants, and so forth).

- Watch the cocoon for signs of change.
- Check references in the library for identification.
- Keep a diary on observations.

Interaction: Understanding

- What changes have you seen in the cocoon?
- What conditions are necessary for the cocoon to mature?
- What did you see happening?
- Was the butterfly strong at first?
- Did it appear easy for the butterfly to come out of the cocoon?

Interaction: Personalization

- Do other animals go through a metamorphosis?
- Is there anything people go through that can be compared to metamorphosis?
- How do you think the caterpillar felt?
- How do you think the butterfly felt in the cocoon? Coming out of the cocoon? After it was completely out of the cocoon and flew?
- Have you ever felt like the caterpillar? When? Why?
- Have you ever wished you were in a cocoon? When? Why?
- Have you ever felt like the butterfly? What makes you feel like that?
- What could happen to make you feel like a butterfly?

Additional Activities

Discuss what this means:

> *"What the caterpillar calls the end of the world, the master calls a butterfly.*
>
> Richard Bach

Experience being in a cocoon. Have the participants crawl into a sleeping bag and zip it shut. Call the students attention to what they feel, hear, see, touch, and smell. Have the students stay there a short time. Discuss.

Activity 7—Animal
Critter Races

Objectives

Handling another living thing is often very different from looking at it or imagining it. Contact elicits a tactile empathy or communication, a deeper relationship, and understanding. This experience teaches thoughtful, gentle contact.

Setting

An inside setting needs some preparation but can work. Actually doing this experience outdoors is better.

Materials

Critters might include grasshoppers, snails, beetles, pet store turtles, worms, lightening bugs, and others.

Special Considerations

Time: If the critters need to be collected, one to two hours. If the critters are at hand, about 30 minutes. It is important not to hurry. To hurry is to treat the critters as objects which is just the opposite of what we want to happen.

Group size: A small group, two to six with each leader. (If the group is larger, small groups can be formed. While a small group participates, the rest of the group can observe. If there is time, groups can take turns participating and observing.)

In this activity it is very important to set firm guidelines on handling the animals. Also, if the animals have been collected in the natural environment, they must be released there. This activity is a great opportunity to teach humane and ethical treatment, elicit empathy, and practice what is taught. If it is not done carefully, however, this activity may have a negative impact.

Process

- Introduce the critters chosen for this activity.
- Show and tell the students how the animals can be handled carefully and gently. Allow squeamish individuals to work with a nonsqueamish partner, or introduce a way for them to handle the critter in a non-threatening way.

- Tell participants to "treat the critters the way they would want to be treated if they were the critter".
- *No chasing, scaring, and so forth.*
- It is important that participants know the critters are being returned to their natural environments because otherwise the critters would die.
- Keep the critters in a natural environment until time for use.
- When finished with them, put them carefully back.
- Warn participants to get on their knees, no messing around.
- For the race, put the critters within a space—a circle drawn on the ground, a paper plate—whatever is fitting for that particular critter.
- The first (or last) critter to leave, crawl away, or fly away, wins!
- Encourage the participants to sit quietly and watch. Too much giggling and excitement will distract from the careful behavior.

Interaction: Understanding

- Talk about the animal chosen, a little about its life-style and why it is important. Some research before hand is in order.
- Talk about how the critter feels. Is it what you expected?

Interaction: Personalization

Discuss winning and losing.

- Did the individuals have control over their critters?
- Could they have done anything to have control?
- Would that have been fair?
- What if the method of control was harmful to the critter?
- How important is winning? Winning at all costs?
- What does winning feel like?
- What does loosing feel like?
- What does winning feel like if it is not fair?
- What does losing feel like if it is not fair?
- Have they ever had an experience that would relate to this?

Discuss empathy.

- What is empathy? (Feeling with someone else.)
- Do the critters really feel like we do?
- How do we think they feel? (Participants will realize that at least they feel pain, hurt, roughness, and fear.)
- Is empathy ever important? When? Why?

Additional Activities

Individuals or groups might look into contests in society, horse and dog racing, sports events, and report on things done, ethically and non ethically, to win! Resources might include interviews with P.E. teachers, athletes, personnel from the Humane Society, and personnel from horse and dog tracks.

Additional References

For more information on horse and dog racing, pit bull fights, or cock fights write to The Humane Society of the United States, 2100 L Street, NW, Washington DC 20037.

Activity 8—Animal

Observe an Ant Colony

Objectives

By watching one of the wonders of the natural world, participants will become more aware of themselves and of their relationship to the natural world.

Setting

Where there is an ant colony or ants. Most of the time this will be outdoors, but on occasion large groups of ants can be found indoors. Commercial ant farms are available and are suitable for this observation.

Materials

- Ants
- Possibly pencil and paper

Special Considerations

Time: Up to 30 minutes

Group size: One person, or small groups

Process

Some information about ants.

Ants are very social and live in large groups or miniature cities, both called colonies. The colony is ruled by a queen ant, who is fertilized only once to produce thousands of offspring. All female ants become workers or soldiers. Males are seemingly worthless, except for fertilizing the queen.

Ants are social, warlike, industrious, and compulsive. It may seem like they have no idea what they are doing.

Ants have exceptionally good eyes. They use vision for orientation. They also seem to have good memories. Ants have a sharp sense of smell centered in their feelers and a sense of touch. Ants need meat and sugar in their diet.

Some of the activities you will observe may include:

- Workers repairing and cleaning the mound
- Young ants beginning to explore the area by circling the entrance to the mound, the circles growing larger and larger

- Ants traveling hundreds of yards from the nest searching for food
- Ants sharing food, bringing food back to the nest or regurgitating it for others
- Ants alerting the rest of the colony to an intruder or danger
- Ants teasing other ants
- Ants fighting with intruder ants
- Ants moving together in a line

Some things you can do:

- Make a map of the mound, nearby mounds, and trails.
- Write down some of the things you observe.
- Drop a dead insect or some food into the ants area.

Do not harm any of the ants or their habitat.

Interaction: Understanding

- What did you observe?
- What do you think are the ants' basic needs? (food, water, shelter, space, social needs)
- What are humans" basic needs? (food, water, shelter, space, social needs)
- What social behavior similarities did you observe between ants and humans?

Interaction: Personalization

- Identify which ant role is yours. Which ant role would you choose for yourself? If these are not the same, tell why.
- How are you like an ant?

Activity 9—Animal

Cricket Chirp Thermometer

Objectives

Through learning about and observing natural wonders, the participants may develop a bond with nature and an understanding that can enhance self-esteem and self-worth.

Setting

The setting can be any place there is a chirping cricket.

Materials

A chirping cricket; a small box to hold the cricket, if desired

Special Considerations

Time: A few minutes
Group size: One person, or any size group
This activity may be best done spontaneously.

Process

When you hear a cricket chirping, count the number of chirps the cricket makes in 14 seconds and then add 40. This should give you the temperature of the air.

If you have taken a cricket out of its natural habitat for this exercise, please return it.

Interaction: Understanding

- What is a cricket? Learn about its life and habitat.
- Are beetles (crickets) harmful? Helpful?

Interaction: Personalization

- How do you feel about what you have just learned?
- Do you ever feel mysterious? How? When? Why?
- Do you ever feel very special or secretive?
- Do you ever feel like others really do not know what is special about you?
- Do you want them to know?

Activity 10—Animal
Sound Exploration

Objective

Self-understanding comes when our surroundings are understood. Sounds are integral parts of our surroundings. The sounds around us reveal much. This experience also encourages participants to become aware of the conscious thoughts about our senses and to explore our less conscious perceptions.

Setting

Anywhere animal sounds are found. (This activity may be extended to include any natural sound or any sound at all.)

Materials

Tape recorder (Trusting people, especially children, with a valuable machine will communicate to them that you trust them and it will build their self-esteem.)

Process

Tell the participants to go outside and record animal sounds.

- Record sounds at different times of the day.
- Find sounds that you like and dislike.
- Find sounds that are necessary, helpful, annoying, pleasant, joyful, sad, exciting, and angry.
- Find sounds of work and sounds of play.

Play the sounds you have discovered for someone else.

Interaction: Understanding

- What kind of sounds did you hear?
- Who made those sounds?
- Why do animals make sounds? (fun, warning, working, playing, communication) Give examples.
- Does communication take place with words only?
- Demonstrate how the same words with different sounds can convey a different message. Do people ever do this? Give examples of animal sounds that do the same.

Interaction: Personalization

- How did you feel about this experience?
- How did others react to the sounds you "found?"
- What sounds did you have a positive reaction to?
- What sounds did you have a negative reaction to?
- Were any of the sounds annoying? Scary?
- Did others react to the sounds the way you did? How were their reactions different?

Additional Activities

- Mimic the animal sounds. Record your sounds and compare.
- Record you personal "sound symbols," the sounds that are you—the sounds that tell how you feel, how you act, what you do, what you dream of being.
- Go outside alone or in a small group. Sit quietly for a few minutes, then make sounds and observe the reaction animals have to your sounds.
- Rap gently with a stick on the trunk of a dead tree. This may often bring a squirrel, a sleepy-eyed owl, or other birds to one of the openings.
- Tap two heavy sticks gently under the surface of the water in a beaver pond. This will often bring a beaver or otter to the surface.
- Tap two pebbles lightly together. This will attract chipmunks, squirrels, and rabbits.
- Make a sucking noise with your lips on the back of your hand or a clicking noise. This incites interest among smaller animals.
- Hold a wide blade of grass stretched between your thumbs, place your lips on the grass so they touch both thumbs. Blow through the hollow space between the thumbs. This sound will stop chipmunks, squirrels, and other animals in their tracks.
- Mimic the sound you hear an animal make. See if that animal responds.

Activity 11—Horticulture

Make a Jack-O-Lantern

Objectives

Carving pumpkins offers opportunities for projection, accomplishment, decisions, and a catharsis for frustration and anxiety.

Setting

Someplace you can be messy.

Materials

- Paper and pencil (optional)
- Newspapers
- Knife
- Large spoons for scraping
- Bucket for garbage

Special Considerations

Time: 30 minutes

Group size: Individual or small group

For safety, it is important to have a capable person (adult) use the knife. All other parts of this experience can be done by children.

Process

Have the participants design a face before carving.

- Carve the jack-o-lantern.
- Name the jack-o-lantern.
- Display the jack-o-lantern.
- Discussion will take place while carving the jack-o-lantern.

Interaction: Understanding

- What kind of faces do jack-o-lanterns have?
- Why? What is the purpose of the jack-o-lantern?

Interaction: Personalization

- Why did you choose this face?
- Is this jack-o-lantern like you ? Unlike you? As you would like to be?
- If Jack is happy. . .

  Why is he happy?

  What is he laughing at?
- If Jack is scary. . .

  Who is he scaring?
- If Jack is unhappy. . .

  Why is Jack unhappy?
- Do you ever feel like your Jack?
- Who would you like to scare ? Make laugh?
- How does looking at this finished jack-o-lantern make you feel?

Additional Activities

- A final celebration of roasting and eating pumpkin seeds might be fun. Wash the seeds, soak them in salt water for 24 hours, spread them on a cookie sheet, and dry them in a warm (200 F.) oven for several hours.
- Celebrate with pumpkin pie! Boil three pounds of raw pumpkin (3 cans mashed) for about 30 minutes. Follow any pumpkin pie recipe calling for raw pumpkin.

Activity 12—Horticulture

Naming

Objectives

Looking closely at something, such as a flower, and investing something of themselves in naming it, helps participants become more aware and more personally connected with that thing. Such close observation techniques encourage better observation skills, clearer perception, and personalization.

Setting

Outside where flowers or plants abound, inside a room or office, or maybe in a flower shop.

Materials

Availability of plants or flowers. If the flower is going to be drawn, crayons or colored pencils, and paper.

Special Considerations

Time: 20-30 minutes, if done with a group, less if done with an individual

Group size: Individuals or in very small groups of 2 or 3

It is illegal to pick flowers in public places, even those considered weeds.

Process

Tell participants to take some time to look at the flower or plant, viewing it as though they were seeing it for the first time. Look at it closely; examine it carefully.

- What are the colors?
- What shapes do you see?
- What is the texture?
- Are there patterns?
- How many parts are there to this plant or flower and what are they like?
- How many plants or flowers like this one are there?
- What does it remind you of?
- How does it make you feel?

Ask the participants to name their plant or flower. The participants may share in the following ways:

- Gathering together in a group, describing their flower or plant and sharing its name.
- Drawing a picture of the flower or plant, naming it, and displaying the drawing.
- Talking individually with the facilitator.

Interaction: Understanding

Describe the plant or flower you have been viewing.

Interaction: Personalization

- If you were a plant or flower, what would you want to look like?
- If you had a big bunch of flowers or a plant, to whom would you like to give them?
- Who would you like to have send flowers to you?

Additional Activities

- Find your flower or plant in an identification manual.
- Design a make-believe flower or plant. Name it. Tell about it.

Activity 13—Horticulture

Uniqueness

Objectives

Discovering the uniqueness in something as common as an apple or a leaf emphasizes the uniqueness of every person.

Setting

Ideally if a leaf, pebble, or natural object is used, a natural setting outdoors is best. This activity can be done anyplace, though. Natural objects can be brought indoors.

Materials

Natural objects that are found in numbers, so each individual can have one. Suggestions:

- Leaves from the same tree
- Apples from the same tree (or grocery store)
- Peanuts
- Oranges
- Pine cones
- Broken up twigs
- Leaves from plants or weeds
- Pebbles or small rocks

Special Considerations

Time: about 30 minutes

Group size: Somewhere between 10 and 20 works best

Process

- The group members sit in a circle on the ground or floor (or in chairs if the ground or floor is not suitable for the group).
- Each member of the group takes a leaf (or whatever the object is) from the branch (or basket).
- The participants are instructed to carefully examine their leaves, looking closely at the size, shape, colors, and odd markings.
- The participants are asked to introduce their leaves to the group in two or three sentences.

- They may wish simply to describe the leaf.
- They may wish to name the leaf.
- Their introductions may be scientific, introspective, imaginative, or however they wish.

- The facilitator may wish to "model" the introduction. An example: "My leaf is named Genie. She is small and green. She is also a magic leaf, but I won't tell you why yet. I will save that for later."
- Other examples of introductions:

  "My leaf's name is Harry because it has these fuzzy things on it."

  "My leaf has my name because it is mine and small like me."

  "My leaf is green with these dots on it."

After all of the leaves are introduced, the facilitator asks the members of the group to look at their individual leaves one more time, then to put them into the center of the circle in a pile. After that is done, the facilitator asks the group to close their eyes and the leader mixes the pile up. The group then opens their eyes and each person finds the specific leaf held earlier. (Most of the group will find their own leaves easily. If someone does not find the correct leaf, check the leaves of others in the group. Eventually, everyone will have the leaf previously identified. If not, point out that everyone definitely recognized that the leaf now held was or was not the right leaf.)

The facilitator points out that each leaf was unique and different, and that each leaf had important things about it. Some had been used for food, some for homes. All leaves cleanse the air for animals to breath. Every leaf is important and unique and different... every leaf that is now, was, or ever shall be! Imagine all those leaves. Every worm, every blade of grass, and every person is also unique and different.

Finally, the facilitator tells the participants that in the future whenever the participant see leaves, rakes leaves, see budding leaves (or apples or whatever the object) it will remind them that they, too, are "special."

Interaction: Understanding

- How was your leaf unique, different?
- What useful and important purposes did it serve?

Interaction: Personalization

- Close your eyes for a bit and think about something about yourself that is really special.
- Think about why you are important and how you would like to be important.

Additional Activities

- The facilitator might return to the group in the future with a leaf (or apple) and ask what it reminds them of. "I am special."
- Follow up by having participants do an "I am special" collage or "nature art print."
- Using small flat disks of clay and finger prints, prints from natural objects printed onto recycled paper, or using paints made from natural dyes, press out a personal "I am special" symbol.

Activity 14—Horticulture

Tree Rings

Objectives

The participants will look at a part of nature and relate it directly to themselves.

Setting

The setting can be informal, outside. If a slab of the tree is available or can be cut, it can be brought inside for a more permanent display.

Materials

- A slab of wood cut from an old tree that has already been or is being cut down. (If there is enough, one for every individual.)
- Very small nails or pins and papers to glue onto the slabs to make flags.
- Small hammer
- If the flags are very small, numbers on them might be preferred. Then large piece of tag board for a poster would be needed.

Special Considerations

Time: Flexible, about 30 minutes to do the planning, but the entire project may take additional time.

Group size: Individual or any size group

Process

- Look at the tree and count the tree rings. Figure out how old it was.
- Notice large growth rings and small growth rings. What conditions caused growth rings of different sizes? (Lots of growth, large rings.)
- Where did the tree come from?
  - What is that area like now?
  - What was that area like when the tree was very young?
- Why was the tree chopped down?
- Using nails, develop a timeline on the stump. Find the following things:

- When were the participants born? Their facilitator?
- When were parents or grandparents born?
- Mark certain historical events.

- What events and changes have occurred around the tree while it was alive?

Interaction: Understanding

- What does each tree ring stand for? How old was this tree?
- Tell what each marker on the stump signifies.
- Why was the tree cut down?
- What did this tree contribute while it was alive? (Make up a scenario if participants have not see the actual tree.)

Interaction: Personalization

Find your own timeline on this tree stump.

- What was the tree like when you were born? Your grandparents?
- How do you feel about this tree being cut down?
- How is your life like a tree?

Additional Activities

The participants may want to write their reflections to the Personalization Section in a journal.

Read, or encourage the participants to read, *The Giving Tree* by Shel Silverstein (1964), published by Harper Collins, New York, NY.

Have the participants illustrate a special tree, real or imaginary.

Activity 15—Horticulture

Forcing Bulbs

Objectives

Doing something different and special with a growing plant can be an exciting experience. It provides an insight into the wonders of nature, the cycles of life. This activity offers an opportunity for control as well as accomplishment.

Setting

Some place to work with sand, gravel, and water.

Materials

- Newspapers
- Containers (the right size for a plant of the kind you have selected)
- Bulbs (purchased from your local nursery)
- Sand, gravel, and water
- A cold place (refrigerator or outdoors)
- Window with natural light

Special Considerations

Time: 20 to 30 minutes to prepare, several months to carry out

Group size: Individuals within any size group

Bulbs recommended for "forcing": Hyacinth (Roman or Dutch), Narcissus Daffodil, Narcissus, Jonquil, (Early Narcissus), Tulip (Early Single, Early Double, Darwin, Lily-flowered), and Crocus. Check with your local nursery for further information.

Process

Select the desired bulb and follow this procedure (except for Lily of the Valley).

Step 1—*Planting:* place a layer of *moist* compost or mixture of sand and gravel in the bottom of the container. Set the bulbs on this layer. They should not touch each other or the sides of the container. When finished the tips of the bulbs should be above the surface and there should be about 1/2 inch between the top of the mixture and the bowl.

Step 2—*Plunging*": Now the bulbs need to be in complete darkness at a temperature of about 40 F. Wrap them in a black plastic bag and put them into a refrigerator. Leave them there for 6-10 weeks. (Check occasionally to see if the compost is still moist, add water if needed.)

Step 3—*Growth*": When the shoots are about 1-2 inches high, the bowl may be put in a shady spot indoors with the temperature about 50 F. Keep the compost moist at all times. Mist the plant. After a few days, move the container near a window. When buds appear the plant can be moved to the site chosen for flowering.

Step 4—*After flowering*: Cut off the flowers, but not the stalks. Continue to water until the leaves have withered. Remove the bulbs and allow it to dry, then remove the dead foliage and store it in a cool dry place. Plant in the garden in the autumn.

Lily-of the-valley can also be forced. Place the pips in a container with a bed of gravel or sand with the buds just above the surface. Water thoroughly and place the container in a cardboard box with several holes for two weeks at room temperature. Then, gradually expose them to more light.

Right before the plants are ready to flower, they can be given as gifts. Include with the gift the name of the plant and simple directions for maintaining.

Example:

Name of plant

Care: keep moist.

After blooming, continue to water until the leaves have withered.

Remove the bulbs and allow to dry, then remove the dead foliage.

Store in a cool, dry place. Plant next fall in your garden.

During the time the participants are working with plants, some of the following things can be discussed.

Interaction: Understanding

- What were the bulbs we planted?
- What are we doing that is different from what regularly happens to them?
- Why are we doing this?

- Do people ever "force" things to happen? Can you think of examples? (piano lessons, go to bed early, get a shot)
- Is forcing good or bad?
- If people are forced, how can they handle it? Are people different from the flowers?
- Can people make choices?

Interaction: Personalization

- How did you feel when we planted the bulbs? While we were waiting? When they sprouted? Flowered?
- Has anything ever happened to you that reminds you of this process? Have you ever been forced to do something? (piano lessons, homework)
- How did you feel?
- Was that forcing good or bad?

Additional Activities

See *Naming*, page 127, and *Gifts*, page 177.

Resource

Hessayon, D.G. (1980). *The house plant expert*. New York: Charles Scribner's Sons.

Activity 16—Horticulture

Forcing Branches

Objectives

Sometimes seeing something out of its normal context makes a stronger impression. This activity will give a close, personal view of one natural process.

Setting

Indoors in late winter

Materials

Deep vase; branches from flowering trees

Special Considerations

Time: 15 to 20 minutes to set up, several sessions over several weeks

Group size: Individual or groups

Process

Follow these steps to force early flowering branches. The forcing process must not begin until the branches have been exposed to at least eight weeks of temperatures below 40 F.

Step 1: Use long branches; the longer, the better the bloom. Crush the lower most two inches of the branch. Immerse at least eight inches of the base of the branches into tepid water (not hot) for a day. Place in a sunny window of a cool room (60-65° F) for about a week. Spray the branches each day with warm water.

Step 2. When the buds are about to burst, bring the branches into a warmer room. Refill and replace the water, adding a little charcoal to the water to keep it sweet. Periodically, cut off a piece of the base of the branch to keep water conducting vessels open. The blossoms will last longer if the branches are kept cool. When blooming ends, the leaves will appear.

Interaction: Understanding

- What kind of branch are we forcing?
- What are we doing that is different from what regularly happens?

- Why are we doing this?
- What happens to the branch after we are done? What would have happened if we had not brought it inside to force it?
- Do people ever "force" things to happen? Can you think of examples? (piano lessons, go to bed early, get a shot)
- Is forcing good or bad?
- If people are forced, how can they handle it? Are they different from the flowers?
- Can people make choices?

Interaction: Personalization

- How did you feel when we forced the branches? While we were waiting? When the branches bloomed?
- Has anything ever happened to you that reminds you of this process? Have you ever been forced to do something. (Piano lessons, homework)
- How did you feel?
- Was that forcing good or bad?
- Did you even think about what would happen to the branch when we were done? How do you feel about that?

Additional Activities

See *Naming*, page 127, and *Gifts*, page 177.

Resource

Olszowy, 1970.

Activity 17—Horticulture

Dyeing Flowers

Objectives

The drastic change in appearance of the flower after being dyed is magical and dramatic. The change of color of the flower offers much to think about and discuss.

Setting

An office or classroom.

Materials

- A white or light-colored flower (carnation or Queen Anne's Lace)
- A tall vase
- Water
- Vegetable (food) coloring

Special Considerations

Time: 5 minutes for setting up, 25 minutes for discussion, 24 hours for dying

Group size: Individual to large group

Process

Insert the flower into the vase filled with colored water. The flower will "drink" the colored water and eventually change color. Start the process early one morning and plan the discussion for the next day. The coloring process will begin immediately, but it will be more dramatic the next day.

Interaction: Understanding

- What happened to make the flower change color?
- How many liked the flower when it was white best? Changed color best?
- How is the flower different than it was originally?

- What do people do that could be compared to this flower? How do people change things about themselves? (dye their hair, clothes, plastic surgery, makeup, tan, acting differently, losing weight)
- How can changes like this affect peoples' lives? List some examples.

Interaction: Personalization

(These questions might be too personal to share. They may be written or answered in a journal. Those wanting to share could.)

- Is there anything about you that you have changed?
- How did it affect your life?
- Did you become a different person?
- Is there anything you would like to change about yourself?

Activity 18—Horticulture

Grow a Weed

Objectives

There is usefulness and beauty in every living thing.

Setting

An office or classroom

Materials

- Pot
- Dirt
- Water
- A weed, or weed seeds

Special Considerations

Time: 30 minutes; more if a walk to collect seeds is included

Group size: Individual or small group

Process

On a walk in the fall, collect some seeds from various "weeds." Bring them back and plant them. Even if you do not know what the seeds are, it is fun to see the surprises when they finally blossom. (Some seeds need to experience very cold temperatures before growing, many do not. You may wish to put your pot of seeds outside for 6 to 8 weeks in very cold weather.)

At the planting or after the weeds have grown, discuss the following questions.

Interaction: Understanding

- What is a weed? Define it!
- What are people's reactions to weeds?
- Are weeds useful?
- Should people get rid of all the weeds? What would happen if they did? (Refer to the activity, *Pyramid of Life*, page 159.)
- What are some useful weeds?

Interaction: Personalization

- How do you feel about weeds?
- Do you ever feel like a weed? When?
- George Washington Carver once said, *"A weed is just a flower man has not found a use for."* What do you think of that statement?

Additional Activities

Look up or ask a horticulturist about thistles, dandelions, milkweeds, and other weeds. Fix a meal of "weeds." Refer to the following or other references or for directions.

Additional References

If it is available, an excellent resource is:

Graham, A. and Graham, F. (1976). *The milkweed and its world of animals*. Gardin City, NY: Doubleday & Company.

Also look for references on edible wild plants.

Medsger, O.P. (1966). *Edible wild plants*. New York: Collier Books.

Gibbons, E. (1962). *Stalking the wild asparagus, A field guide edition*. New York: David McKay Company, Inc.

Also look for other books by Euell Gibbons.

Activity 19—Horticulture

Plant and Grow Some Flowers or Plants

Objectives

Through the growth and care of other living things, the participants can learn about themselves.

Setting

Office or classroom

Materials

Pots, newspapers, soil, seeds (fast growers include: sunflowers, morning glories, zinnias, marigolds, and cosmos)

Special Considerations

Time: 15 minutes to plant; 8-10 weeks to grow

Group size: Individuals or groups

The ultimate success of this project (flowers growing) will depend on the facilitator. There are opportunities for learning about unpleasant natural consequences if proper care is not given by assigned responsible participants.

Process

- Plant the seeds according to the package directions.
- Water them according to the directions. (If you are growing the seeds inside and using dish pans or tubs without drainage, be sure to put rocks or gravel in the bottom. Do not water too much or the seeds or plants will rot.)

Interaction: Understanding

- What does a plant need to grow? (soil, seeds, water)
- What happens if no one takes care of it?
- How are those plants like children?
- What happens when parents do not take care of their children? List examples.

Interaction: Personalization

- How would you feel if you were the one responsible to take care of the plant and you did not?
- Has something like that ever happened to you, where you were responsible and did not follow through? What happened? How did you feel?
- Have you ever been in a situation where someone did not take care of you? What happened? How did they feel? How did you feel?

Activity 20—Horticulture

Garbage Can Gardening

Objectives

Exciting discoveries can be made from planting what we would normally consider garbage. Everything has a purpose and is useful!

Setting

An office or classroom

Materials

Some "garbage." Look at the Process section and chose from the list of possibilities.

Special Considerations

Time: 20 minutes to plant: several weeks to grow.

Group size: Individuals or small groups per plant; or large group divided into small groups

Process

Choose from the following and follow directions.

Avocado—Soak the pit in warm water for 4 to 5 days. Peel off the brown skin that covers the pit and cover two-thirds of the pit with soil. (The pit may also be started in water, but it takes longer and the pit tends to rot.) Make sure that the larger, flattened, and slightly indented end is downward. Germination takes four to five weeks and occurs best at 80-85° F., but it will also germinate at room temperature. Pinch back the top when the plant is six inches tall to encourage branching. Avocados require full sun.

Carrots—Cut off the top inch of the carrot, and place in a bowl of moist sand or gravel. Set it in a sunny location. Lush green leaves will emerge. Other plants with tap roots such as beets and turnips can also be grown in this way.

Citrus seeds—Use grapefruit, lemon, lime, orange, or tangerine seeds. Place the seed in 1/2 inch of soil, and place in a warm location (70° F). The plants have dark green, shiny foliage. Give full sun.

Pineapple—Cut off the top of the fruit, and let it dry for a day before planting it in moist, acid soil (add coffee grounds.)

Sweet Potato—Do not use oven-dried or those treated with growth inhibitors. Put the bottom half of the potato in water and place in the dark. Roots develop in 10 to 14 days. Remove most of the new shoots, leaving three or four shoots. Plant in soil and train the vines to grow around a sunny window.

White Potato—Cut the potato into sections with each section having two or three eyes or buds. Cover with three inches of soil. Place in a sunny window.

During the time of planting and growing, there is ample time for various discussion.

Interaction: Understanding

- Why do people throw away parts of plants when they prepare them for food?
- Do you think all people do this? Where might they not? Why?
- What happened to those "garbage" parts when we planted them?

Interaction: Personalization

- How did you feel about planting "garbage?"
- Have you ever felt like "garbage?" When?
- Name this plant with your own, original name.

Additional References

Olszowy, 1978.

Activity 21—Horticulture

Plants in the Office

Plants in the office add a special tone to the room. They also help to keep the air healthy.

A few well chosen plants are in good taste. Plants in the office should be fun, so they should require minimum care. Probably the best resource is the florist or the plant department in a store. Plants have character, so choose one that appeals to you and speaks to or for your clients! Some easy-to-grow plants are:

Araucaria—An easy-to-grow conifer. It gets really big and can be decorated for different holidays.

Chlorophythm—Also known as air plane plant, or spider plant. Quick growing and adaptable, hot or cold, sunny or shady.

Coleus—Cheap, easy to grow with brightly colored foliage. Pinching the coleus tips keeps it from flowering so it will bush instead. The coleus likes sun.

Ferns—They are great to hang in an office. Ask the florist for one that is easy to grow.

Philodendron—Easy, and it grows and grows.

Cactus—A dramatic, ornamental plant. Be careful where you put it so no one hits it or sits on it!

Although more of a challenge to grow, the Christmas Cactus has beautiful flowers!

Activity 22—Horticulture

Recycling Paper

Objectives

Being consumers detaches people from the origin of many products. This activity allows the participants to understand the origin of paper and experience the accomplishment of "making" it. The finished product will have special meaning for the participants.

Setting

Time: 30 minutes, overnight drying time
Group size: one individual or a small group

Materials

- Paper scraps (any paper you wish to recycle—newspapers, notebook paper, paper towels, construction paper)
- Blender
- Paper-making screens, (one hardware cloth screen 8" x 10" and two fiberglass screens also 8"x10")
- Newspapers or towels
- Dish pan

Special Considerations

Although the process is described here, you might want to try this yourself first so you have an idea what is involved and the quality of the product.

Process

Paper used to be made from woven material, particularly linen. Only in the late 1800s did the demand for paper become so great that a new source of fiber was sought and found—wood. Now the demand for paper is so great that it is one factor presenting a threat to the forests of the world. New processes need to be discovered. Recycling is one answer to this problem. Used paper can be used for recycling as well as waist products from lumber mills. Usually recycled paper is made from a combination of these sources.

- Tear scrap paper up into very small pieces (dime-sized).
- Add water in the ratio of one part paper to three parts water
- (It is OK to soak overnight.)
- Blend until creamy. Pour into dishpan. Repeat until dishpan is 3/4 full.

- Stand the paper-making screen (one fiberglass screen stapled to the hardware cloth) up perpendicular with the bottom of the dish pan. Then pull the bottom end of the screen across the bottom until the screen is lying on the bottom of the pan. Lift it straight up horizontally from the bottom of the pan.
- Lay the paper-making screen on a stack of newspapers. Lay the second fiberglass screen on top of the mixture. On top of that put more moisture gathering materials (newspapers or towels). Press down with your hands.
- Remove the top moisture gathering materials, and peal the second fiberglass screen off the paper. Turn the paper-making screen upside down and let the new paper gently fall off onto some newspaper.
- Leave the new paper there to dry overnight.

Using the recycled paper

The new paper can be used for anything you wish. Here are some ideas.

- Write a note or letter to someone special.
- Make a leaf rubbing of the "Special Leaf" from Activity 13.
- Write a poem.
- Have the participants draw a picture of their personal symbols from Activity 27, page 162.

Interaction: Understanding

- Why is there a need to find a new way to create paper?
- What are some of the ways people can deal with this situation?

Interaction: Personalization

- How did this experience feel? The process? The product?
- What can you do personally to help with this environmental situation? (Practical answers—note that the participants can recycle their own paper! Explore why that is not a reasonable solution.)
  - Each person can learn about recycling.
  - Each person can tell others not to be wasteful.
  - Each person can find out how to recycle and do it.
- The use of the recycled paper personalizes this activity.

Activity 23—Horticulture

Bottle Plants

Objectives

This novelty activity offers possibilities for discussion and peer attention. If it is not possible for participants to do this activity, the counselor might want to do it and display the results in the office for discussion purposes.

Setting

An outdoor garden is necessary as a source of fruit. If participants do not have their own garden, perhaps arrangements could be made to "borrow" a few fruits from someone else's garden.

Materials

Growing gourds like watermelon, squash or cucumbers; a large bottle with a small mouth

Special Considerations

Time: A few minutes to set up the activity a growing season of a month or more; and 15 to 30 minutes for discussion

Group size: One individual or small groups

Process

Plant gourds or find some that are already growing in someone's garden. When the fruit is still small, insert it into a bottle while it is still attached to the vine. Allow it to continue growing inside the bottle until it is ripe. Pick it then.

Interaction: Understanding

- What has happened here? How did this happen?
- This is an example of things appearing differently than they are? If you know the whole story, then it is understandable. Are there other situations you know of where the whole story gives the situation a different meaning?
- How do you suppose this fruit would "feel" if it were able to talk?

- This object is a novelty. How do people react when they see a novelty?
- How could this novelty be used to help someone? To get attention?

Interaction: Personalization

- What did you think when you saw this gourd?
- Have you ever felt like this gourd? When? Why?
- If you were this gourd, how would you feel? What would you do?
- If this were your object, what would you do with it?

Additional Activities

If a participant or client has trouble socializing, talking with others, or making friends, this activity may help that person get spontaneous attention. Perhaps the client can "role play" how to share the novelty and how to act as the center of attention.

Activity 24—Horticulture

Boat Races

Objectives

Working closely with natural materials will give participants a deeper awareness and understanding of those items. The more intimate the participants' interaction with the natural environments and the better the participants' understanding of the natural environment, the more self-confidence and self-understanding the participants will have.

This may be a good activity for clients who need to work on positive competition, good sportsmanship, cooperation, losing, or non-competition.

Setting

An outside area along a source of water—a stream, lake, or large puddle. This could be done inside using a child's wading pool, but much of the effectiveness will be lost.

Materials

A source of water; natural materials like leaves, sticks, and bark for making boats

Special Considerations

Time: 15 to 30 minutes depending on the quality of boat being fashioned.

Group size: One individual or a small group

Before starting this project, discuss your impact on the environment. ***Do not take natural objects that will destroy plants or habitat.***

Littering the environment is also a possible risk. ***Materials must be returned to their original place after the experience,*** or as close to the original place as possible.

Process

- Discuss activity rules and guidelines depending on the group or participants. Some rules or guidelines might include:
  - Do not go into the water.
  - Do not destroy plants or habitat while making your boat.

  - Clean up after the activity.
  - Guidelines for interaction between participants.
- If competition, cooperation skills, or social skills are being worked on, role playing some appropriate behaviors may be done at the onset of this activity.
- Have individuals carefully search for materials that will float for making their "boats." Materials may be combined, but unnatural materials may not be used. This could be quite challenging.
- Set limits and rules of the boat race.
- Put the boats into the water and race

Interaction: Understanding

- What did you use for your boat?
- How did that material work?
- What did you learn about the source of water, the current, and so forth?
- If appropriate to this occasion, discuss the rules of competition or cooperation.

Interaction: Personalization

- How did your boat do?
- If the participants are working on cooperation or positive competition, personalize the situation by asking these questions:
  - How did you feel when others were polite? Cooperated? Helped you?
  - What did others do that you liked, that made you feel good?
  - What did others do that upset you or made you feel mad, angry, or sad?
  - What did you do to encourage cooperation? How did you feel then?
  - What did you do to discourage cooperation? How did you feel then?

Activity 25—Horticulture

A Natural Feast

Objectives

Through this experience, the participants become more aware that nature is the food supplier and that all things in nature have a purpose. The participants will learn to identify situations in which popular public opinion is often biased. The activity can also be a vehicle for learning appropriate social behavior and developing social skills.

Setting

Preferably in a natural setting where edible natural food can be found. This can also be done indoors, bringing the food inside.

Materials

- The food
- Source for cooking
- Pots, as needed
- Other ingredients, as directed
- Serving utensils, (If paper plates must be used, buy recycled/recyclable ones.)

Special Considerations

Time: The time may vary depending on what is included in the activity. If the food must be gathered, prepared, cooked, and eaten, the entire activity will probably take two hours. These steps can be done in smaller increments.

Group size: One individual or a small group

Food gathering must be done carefully. It is very easy to identify plants and common varieties that are suggested here, but proper identification is important. Also, be sure to gather from a chemical-free area and wash everything well before eating it.

Process

- Discuss what is to be done with the participants.
- Assign roles and tasks.
- Individuals may be given one food to gather. The group can prepare a meal from those foods.

- Set ground rules and guidelines.

Be sure to gather only what is needed. Gather from a wide area so the plants in one single place are not depleted.

Be sure you know the laws that cover the gathering of wild species of plants. Get permission where it is needed.

Milkweeds

One of the most common and frustrating weeds is the milkweed. It is also one of the most fascinating, nutritious, and interesting plants. The story of the Monarch Butterfly is only half complete without the milkweed, the host plant, where the butterfly lays her eggs, eats, spins the cocoon, and again eats as a butterfly. The bitter milk found in the plant gives the Monarch a bitter taste which her predators do not like. Thus, they avoid eating the butterfly. During World War II the benefits of the milkweed were recognized. For example, flotation devices were stuffed with the fuzzy seeds of the plant.

Certain parts of the milkweed taste sweet and are nutritious, depending on the time of the growing season the food is being gathered.

The *young shoots* come up in late May and early June. While they are young and tender they are very tasty. Pick them by braking them off at the root. Clean and boil and serve the milkweed much like asparagus.

The *young leaves* are also sweet and good to eat. As the leaves become older they become bitter tasting. Pick the youngest leaves near the top of the plant. They can be picked off, boiled, and served like spinach.

The *young flowers* are the next delicious fruit. Picked, boiled, and served like broccoli they are excellent.

The *young pods* finally provide a real treat. Again they can be merely picked, boiled, and served with butter, salt, and pepper, or they can be dipped in an egg and flour batter and fried. They taste something like cucumber. Fried they taste like a fried cucumber!

Dandelions

The leaves arise from this plant in a whirled fashion, with the oldest leaves on the outside and the youngest in the center. This growth pattern is called rosette. The dandelion is high in protein, calcium, phosphorus, iron, riboflavin, niacin, and vitamins A, B and

C. Dandelions were once used as a cure for scurvy. Collect the leaves in spring, flowers in summer, and roots in the fall.

The *dandelion flower heads* can be boiled. Pick fresh, open dandelion flowers, or buds, and wash them. Bring salted water to a boil and add the flowers. Cover and cook over medium heat for five minutes. Remove from heat, drain, and serve with butter, salt, and pepper.

Dandelion flower heads can also be fried. Pick the blossoms, cutting them off just above the stem. Wash and shake off the excess water and then dip into a single beaten egg. Roll the blossoms in a cupful of cornmeal and fry in cooking oil until they turn a light brown color. Salt if desired. They taste like mushrooms.

Cattail

Cattails commonly grow in dense groups by ponds, lakes, swampy areas, and even roadside ditches. The long leaves are erect and sword-like. The flowers are sausage-like at the top of a rigid, sturdy stem. Above the flower is a much smaller sausage of pale yellow which disappears after a short time.

Cattails were a food source to the Indians. They dug the roots and pulverized them to make a sweet-tasting flour. From this flour they made bread and pudding. During World War II the Germans followed the example of the Iroquois when desperate for food.

Rhizome flour is made by digging out the cattail rhizomes or roots, washing, peeling, and drying them in the sun for several days. (They can also be dried for two to four hours in a 200° oven.) When dry, grind them between stones or in a grinder. Sift out the fibers.

Pollen flour is made by collecting the yellow pollen from the cattail. It is very fine and will be blown away in even the slightest breeze. Use a large brown bag to collect the pollen. When you finish collecting it, close the bag and secure the top. Store the pollen in a clean jar.

Cattail Pancakes (serves 4)

1 cup cattail flour (either kind)
1 cup flour
2 teaspoons baking powder
Sift dry ingredients together
2 tablespoons sugar
1/4 teaspoon salt
2 eggs beaten
1 1/3 cups milk
Mix
2 tablespoons melted butter or margarine

Combine all ingredients, mixing rapidly. Pour at once onto a sparingly greased, hot griddle. Turn once when cake starts showing small bubbles. Serve with butter and syrup.

Cattail Muffins (2 dozen)

1 cup cattail flour
1 cup whole wheat flour
2 teaspoons baking powder
1/2 teaspoon salt
1 egg beaten
1/4 cup oil
1/3 cup honey
1 1/2 cup milk

(Optional: add nuts or seeds that you have gathered.)

Combine dry ingredients. Combine wet ingredients. Mix the two, stirring only 10 to 20 seconds. Ignore the remaining lumps. Fill greased or paper muffin cups two-thirds full. Bake for 20 minutes in a 400° oven.

Other easy wild foods to gather are: wild berries, mulberry, raspberry, blueberry, gooseberry, strawberry; eggs, any egg is edible; nuts, walnut, hickory, butternut.

These are some simple recipes for common, easy-to-find wild plants. Many books exist on this subject.

Interaction: Understanding

- The understanding for this activity is shown by the participants following the directions correctly.
- What do people in general think about dandelions, milkweeds, and cattails?
- What would your neighbor think and/or do if you choose to grow a dandelion garden?
- What do you suppose the response would be if a restaurant served one of these dishes?
- Look up more information on these plants and others.

Interaction: Personalization

- What was your response to the information shared in this activity?
- Did it change the way you felt about these plants?
- Would you ever be willing to eat these things again?
- If you were ever lost, without food, for a long time, what would you eat to survive?

Additional Activities

Go to the library and look up edible wild food. Try some other foods.

Activity 26—Environment

Pyramid of Life

Objectives

The interrelationship of all living things is not readily evident in our contemporary culture. As part of our basic identity, that fact is very important to understand.

Setting

Any place

Materials

People, at least ten. Optional: The exercise can be done with building blocks or boxes, ten are needed.

Special Considerations

Time: About 30 minutes

Group size: Fifteen people for pyramid and spotters

If people are used for the pyramid, safety is a primary concern. Be sure guidelines for safety are followed and spotters are used.

Process

Choose ten participants. Assign each a role: four represent plants, three represent animals that eat plants, two represent animals that eat animals, and one represents human kind. Discussion may include which plants and animals are represented by each category.

Explain that all life energy comes from the sun, which is represented by the floor or ground the pyramid is to be build upon. Now, build the pyramid, plants on the bottom, then plant eating animals, then the animal eating animals, and finally humans.

Rather than using people, use boxes. Decorate the boxes or blocks with pictures or symbols to illustrate what they represent. It is fun if large boxes are used. This will necessitate assigning at least one individual to be responsible for each box and other individuals to pull out boxes.

The leader will then share the following scenarios, and the group will analyze what will happen. (All of these scenarios are actually things people are doing today.)

- Because of sprays, a whole group of insects is wiped out. (Gently pull out one of the plant eaters.)
- A dam is built, and because of the flooding of a certain region, a whole group of animals becomes extinct. (Pull out a plant eater.)
- People continue clearing the rain forest. (Pull out a plant.)
- A timber is cut down; the Spotted Owl, a predator, becomes extinct. (Pull out a predator.)
- Humans are eliminated. (Remove the representative for humans.)

Interaction: Understanding

- What happens in this pyramid when the group of insects is wiped out? Who else is affected?
- What happens when a whole group of animals becomes extinct?
- The rain forest is cut. What happens? (In reality, the rain forest is important for cleansing our atmosphere. The greenhouse effect is developing partially because of the declining rain forests all over the world.)
- Predators are wiped out. What can happen? Would there be any affect to the bottom of the pyramid? (Read *Insects in Borneo*, page 8.)
- What happens when people are eliminated? (The natural environment can exist in stable form without humans, but humans are depend on the total environment for their existence.)
- This is a simplified model. Find and discuss the model's inadequacies and inconsistencies.

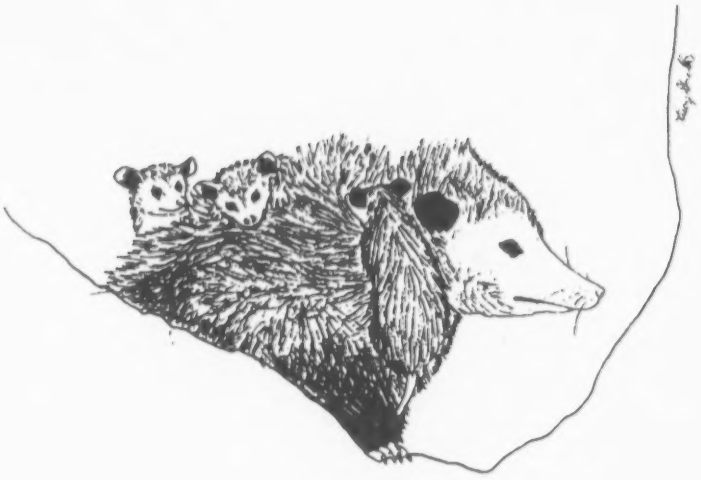
Interaction: Personalization

- Trace back to ground level some of the things that you depend upon for life.
- What would happen if some of the bottom levels of your support were pulled out? Think of examples of things people are doing to cause this to happen: faulty air conditioning and car exhausts cause air pollution, farm chemicals contaminate water, industry pollutes air and water, people purchase products from cleared rainforest lands, and so forth.

- Do you own furniture made of South American wood or buy leather products from South American sources? Do you even know where the products you buy originate? Does this make you responsible for what is happening to the rainforest?
- What are some of the specific things you do to destroy the earth? Make a list. (We all are responsible. If we are a consumer of any kind, we are involved in encouraging destruction.)
- How do you feel about the importance of people?
- What should the human's role be?
- Specifically, what can you do?

Additional Activities

In your own newspapers, look for evidence of food chain contamination.



Activity 27—Environment
Symbols

Objectives

This experience gives the participants an opportunity to really look at and think about the natural environment, and to relate to it personally.

Setting

A variable natural setting is best.

Materials

None

Special Considerations

Time: 15 to 30 minutes, depending on group size

Group size: Any number

If unusual circumstances exist and an outdoor environment is absolutely inaccessible, this activity could be done after viewing nature films or pictures.

Process

Tell participants to think about their feelings, about things they can do, about how they perceive others and how they perceive others feel about them, about their dreams and goals, and about their actions.

Ask the participants to go on a hike into the prairie, the woods, or any place around. They are to search for something that reminds them of themselves, something that could be their symbol. If it is a living thing, they are not to remove it, but they need to remember it to tell about it.

(The leader may decide if the symbol needs to be in that specific environment or if any natural object would be okay.)

Some examples:

"I chose the bee. I'm like him because I buzz around other people and sometimes I like to sting them or hurt them. People don't like the bee very much."

"I'm like that flower down by the creek. It is the only one and sometimes I'm very lonely."

"I'm like the grass, I'm just ordinary."

"This rock is like me. It is round and perfect, except for this one hole in it."

"I chose the ladybug because I'm shy."

"I'm like this tree because I'm small."

After the experience, have the participants share in one of the following ways.

- Have the participants gather in a group and those who want to can share.
- Individuals can share with the leader.
- If the participants have a journal, they can write about their symbol.

Interaction: Personalization

- What did you choose for your symbol?
- Why?
- What did you discover as you searched?

Additional Activities

- Have participants mount or draw their symbols.
- Make a lapel pin. Paint the symbol on small wooden circles, available at craft stores. Buy pin backs, also available at craft stores, and glue them to the wooden circles.
- Make a pendant. Cut a log that is about two inches in diameter into slices. Drill a hole through the top of the slice. Use yarn as a cord. Paint the symbol onto the front of the log slice and cover it with a clear acrylic.

Activity 28—Environment

Clouds

Objectives

This activity enables participants to "look" at the natural environment. It is a projective technique and it gives you an opportunity to know more about the participants.

Setting

Preferably outside, on a grassy hillside. But inside, by a big window with a good view of a cloudy sky will suffice.

Materials

Clouds to view.

Special Considerations

Time: A few minutes or longer, depending on the situation and the individuals involved.

Group size: Any size

This activity may have to be spontaneous, and that is possible since it does not need to take a lot of time.

Process

The best way to watch clouds is to sit comfortably on the ground or lie on your back and look up at the sky. If this is not possible, find the most comfortable position possible.

Watch the clouds and visit as you would with any kind of projective activity.

- What do you see?
- What is it doing?
- How is it feeling?
- How do you feel about it?
- What other things are you thinking about?

After the experience, have the participant share in one of the following ways:

- Individually;
- With the group in a circle;
- By writing about their experiences in a journal.

Interaction: Understanding

clouds may be taught as part of science. It is not necessary to understand the scientific explanation of clouds for this activity.

Interaction: Personalization

- What do you see?
- What is happening?
- How is it feeling?
- How do you feel about it?
- What other things does it remind you of?

Additional Activities

Clouds that represent a client's thoughts, feelings, life, or wishes can be made out of cotton puffs and glued to paper, or they can be drawn.

Activity 29—Environment

Sensory Hike

Objectives

To involve all of the senses as the participants are learning to become aware, to observe, to feel, and to develop a personal contact with the natural environment.

Setting

Outdoors in a comfortable setting. This activity is specific to the setting, so doing it more than once in different settings is desirable.

Materials

Participants might relax more if they wear older clothes, or if they have a newspaper or something to sit on.

Special Considerations

Time: About 30 minutes

Group size: One to ten individuals (With more than ten, there may be undesirable interference from members in the group.)

Process

Have the group sit comfortably on the ground, spread apart so no one is touching anyone else. (The facilitator might be prepared for those who object to sitting on the ground by having sit-upons available. If the facilitator sits on the ground, this will aid in establishing the tone.)

It may be necessary for the facilitator to explain that this is a sensitivity experience with the natural surroundings, not with other people. A serious intent is important. If the participants do not feel like doing something they are asked to do, then they can quietly refrain without comment, thus respecting the rights of other group members.

The facilitator follows a script something like this:

"With your eyes closed, open up your ears and hear the birds, wind, vast silence, water, leaves, wind, or human sounds like automobiles and airplanes. With your eyes closed, continue listening for a minute or so. Do not make any sounds or speak. Extend your ears. Hear sounds you have never been aware of before." (Time 30 seconds before going on.)

"With your eyes still closed, put your hands on the ground and gently feel the top. What is it like? Is it soft, crunchy, cold, or warm? Push your hands under the top covering of the ground. Is it different here? What does it feel like? Warmer or colder?"

"With your eyes still closed, pick up a bit of the earth or ground near you. Feel it. Keeping your eyes closed, smell it. How does it smell? How do you feel about that smell?"

"With your eyes still closed, smell the air around you. Feel the air on your body, on your face." (Pause for a few seconds.)

"Now open your eyes and look at the ground where you have been sitting. What is there? What are the colors? The texture? The content? Squint so that everything is blurred together and observe the colors... and the texture... and the movement. What is the purpose of this part of the environment? What lives in the earth? Who goes there? What happens there?" (Sharing the answers may interrupt the mood of the experience.)

"Now let's explore that part of the environment at eye level. Look at it and see what is there. Notice the color... texture... movement. What lives there? Who passes there? What happens there? Squint so it is blurred and again explore the color... texture... movement. Think about what you are feeling."

"Now lie on your back (optional, leaning back on hands and looking up is OK) *and look up. What do you see? Notice color... texture... movement. What lives there? Who passes there? What happens there? Squint so it is blurred and again notice the color... texture... and movement. Think about how it makes you feel."*

If at all possible find a final observation point up in a tree or up high, looking down.

"Look down. Notice the color... texture... movement. What lives there? What happens there? Who passes there? Squint so it is blurred and again notice color... texture... and movement. Think about how it makes you feel."

"From this vantage point, look around you, at eye level. Is it any different than eye level on the ground? Now look up. Notice the color... texture... and movement. Now squint. How is this different from looking up at ground level?"

After the "sensitivity hike," gather together in a group or write in a journal and consider the following questions.

Interaction: Understanding

- What did you see that you had never seen before?
- If you were an animal seeking shelter, who and where would you be?
- If you were an animal seeking safety, who and where would you be?
- If you were an animal looking for prey, what would be your best position?
- Where do people pass?

Interaction: Personalization

- How did you feel about the different observations?
- How were your feelings different? Why?

Additional Activities

Do this exercise in different places and at different times of day and night and compare the different discoveries and sensations.

Activity 30—Environment

Death

Objectives

Death is part of life, and in nature the cycles of life and death are evident; their relationship to one another is dramatized. One cannot exist without the other.

Setting

Outside

Materials

Paper and pencil

Special Considerations

Time: 30 minutes

Group size: One to ten individuals

Process

Go for a walk and look for dead things. Write down what you find.

Object: Where was it found? How did it die? How is this object contributing to life?

Gather together in a group and share the answers to the questions you have asked.

Interaction: Understanding

- What objects did you find that were dead?
- Where were they?
- How did they die?
- How are they now contributing to life?

Interaction: Personalization

- What kind of reactions did you have while doing this activity? (The leader might ask if any silliness or giggling were experienced and why this might have been so. Do the participants feel that this is disrespectful or a way of dealing with an uncomfortable or threatening subject?)

- What feelings did you experience while doing this activity?
- Have you ever experienced someone or something you love dying?
- What questions, problems, or concerns do you have about dying? (Perhaps this needs to be done with less risk. Ask the participants to raise their hands if they have some feeling of uncertainty or fear related to dying. Ask if any of the participants wish to share. Acknowledge that this is a personal topic and that it is very normal for most people to have some fear or concerns about death.)
- This is an activity that will stimulate personal stories. Plan a sharing time or have the participants share stories in a journal.

Additional Activities

If there is a need for more discussion, read *The Tenth Good Thing About Barney.* by Judith Viorst (1973) published by Atheneum, New York, NY.

Activity 31—Environment

Perceptions

Objectives

Looking at something from different viewpoints helps the participants understand that individuals have different perceptions of things. It also gives the participants a different perspective of a natural object.

Setting

Outside involving natural objects is best, but inside will also work.

Materials

- Some natural object to observe, like a tree, plant, or rock.
- A paper and pencil.
- Scarves or rags to use as blind folds.

Special Considerations

Time: 30 minutes

Group size: Individual or small group of 4 to 6

Process

Blindfold members of the group. Lead them to the object that has been chosen for exploration.

Ask each individual to explore what you have shown them, thinking of several words to describe it.

Object: Tree

- One person at a leaf
- One person with cluster of leaves
- One person at trunk
- One person at ground entrance
- One person at a twig
- One person smell the object
- One person taking off a blindfold looking up from ground position

Object: Large Rock

- One person at large flat surface
- One person at point
- One person at ground
- One person at rough surface
- One person listening to the object

The participants might look at the object through squinted eyes, upside down, or from up high.

After the object is explored, have the participants write down their descriptions.

Gather together in groups and have the participants read their descriptions out loud. Have the group guess what is being described.

Read the poem "The Blind Men and the Elephant."

Perception according to *Webster* means the awareness of an object through one's senses.

Interaction: Understanding

- Why did the descriptions of the same object differ so widely?
- Can persons have different opinions and all be right?
- Do people sometimes perceive events or other people differently? Think of some examples.
  - A parent and a child perceive going to the mall differently.
  - A teacher perceives an outspoken and funny student differently from the student's classmates.
  - Cleaning one's room is viewed differently by parents and children.

Interaction: Personalization

- Think of something you look at differently than someone else. What is it?
- Why do you feel as you do about it?
- Why do they feel as they do about it?
- Does this put you at odds with one another? How could you resolve the difference?

Additional Activities

The descriptive words can be used to create a group poem about the object.

Activity 32—Environment

Scavenger Hunt

Objectives

A scavenger hunt is a fun way to create thoughtful observation as well as self-discovery.

Setting

Outdoors, in an area with defined boundaries.

Materials

Pencil and paper; bag

Special Considerations

Time: Variable, 20-45 minutes

Group size: Adaptable, can work in partners or small groups, or be done as an independent exercise by an individual

Process

Before beginning, emphasize to the participants that they are not to destroy anything in the environment. If there is something they can not bring back, they can make a note of it and its location!

Choose from the following list for items to find. Four or five items may be enough.

- The oldest thing you can find
- Something fun
- The youngest thing you can find
- An example of opposites
- Something you like
- Something that smells good
- Something you dislike
- Something showing change
- Something good
- Something that scares you
- Something bad
- Something used by an animal
- Something ugly
- Something that is food
- Something beautiful
- The biggest sound

- Something that represents joy
- The tiniest sound
- Something that represents love
- Something imaginary
- Something that represents power
- Something that is a home
- Some evidence of pollution
- Something that is blue
- Something sad
- The biggest thing
- Something that reminds you of yourself

If participants are in a group or with partners, some of the following might be interesting:

- Two stones that fit together
- Two leaves that fell last year from the tree
- Agree on the most beautiful thing
- Write a poem together about nature
- Decide on an improvement you would like to make in the environment
- Use some natural objects and create music together
- An acorn and an oak leaf

When the groups are finished, go through each item and ask what was found. De-emphasize winners and losers, but give special recognition for individual items.

Interaction: Understanding

- What items were easy to find?
- What items were difficult to find?

Interaction: Personalization

- How did you feel when you were doing this?
- How did what your items compare with what others found?
- If participants worked with partners:
  - Did you and your partner usually agree?
  - How did you feel if you did not agree?
  - How did you usually resolve a disagreement?
  - How did it feel to compromise, to resolve an issue?
- What did you become aware of that you were not aware of before?

Activity 33—Environment

What Do You Need?

Objectives

Participants can learn a lot about themselves when they discover what is important to them.

Setting

Indoors

Materials

A copy of the list of "things" shown under the Process section for each participant; pencils

Special Considerations

Time: 30 minutes

Group size: Any number, smaller groups of six to eight for discussion

Process

Have the participants circle the following items that are necessary for them.

- curling iron
- electric knife
- fan
- lawn mower
- brick homes
- sugar
- tape player
- power tools
- bathtubs
- running water
- air conditioning
- electricity
- money
- fertilizer for crops
- VCR
- microwave
- computer
- dishwasher
- beef
- blow dryer
- electric can opener
- milk
- electric lighting
- plumbing
- pop
- television
- electric shavers
- typewriters
- beds with mattresses
- furnaces
- carpeting
- books
- radio
- video games
- fax machine
- fashions

(If something is not on the list and you feel should be, add it to your list.)

With small discussion groups, give all participants a chance to share what they circled. With larger groups, go through the list and have those that chose each item raise their hands or stand.

Interaction: Understanding

- Discuss the difference between "need" and "luxury".
- What do people need?
- What helps determine what is on a person's list?

Interaction: Personalization

- Go back over the list and circle the five things that are most important to you.
- Do these items have anything in common? Do they tell you anything about you?
- Would your parents have circled different items? Your friends?
- How would you feel if you had to give up these "things?"

Activity 34—Environment

Gifts

Objectives

A mentally healthy person is able to "give." Adlerian psychology recommends "giving" tasks as a therapy. For some, "giving" to another person is very difficult. It is much easier to "give" to an animal or the environment. As "giving" becomes less threatening, "gifts" to other people become easier. This activity provides a non-threatening opportunity to "give a gift."

Setting

Wherever it is appropriate for the gift and giver.

Materials

Whatever materials are needed.

Special Considerations

Time: Although each situation may take only one session, the entire exercise may be an extended experience over several weeks or months.

Group size: Small groups or individuals

Keeping the "gifts" secret may or may not be appropriate. The facilitator needs to decide if and what recognition is appropriate and when it is appropriate. Continue at a level of "giving" until the participant is ready to move on.

Process

Begin this series of activities focusing on the environment.

- Have individuals choose something they can do to help.
  - Water a flower
  - Pick up litter
  - Move a rock out of the road
  - Clean off a sidewalk
  - Add to compost
  - Plant something
- Participants (or group) do their chosen project.
- Discuss the experience with individuals or small groups.

Interaction: Understanding

- What did you do?
- How did that help?

Interaction: Personalization

- How did you feel when you did your task?
- How do you feel now?

Process

The second part of this process focuses on "giving" to animals.

- Put out nesting materials for birds in the spring.
- Put out bird food or squirrel food.
- Give your dog a treat for no reason.
- Make a toy for a cat (string tied to stuffed nylon sock toe).
- Do a project for the Humane Society (poster, work, and so forth).

Each participant (or group) chooses an activity and does it.

Interaction: Understanding

- What did you do?
- How did that help?

Interaction: Personalization

- How did you feel when you did your task?
- How do you feel now?

Process

The last focus is on "giving" to people.

- Send a special card to someone not expecting it.
- Write a note complementing someone.
- Give an apple to your teacher.
- Pick up something for someone.
- Say hello to ten people you pass in the hall.
- Help someone carry something.
- Say thank you to the people who serve lunch, or to someone else.
- Give someone a compliment.

(To begin with, the participant might need to choose someone to give to who is low risk, like the school custodian, or people who serve the lunch. Work toward those persons that present a higher risk, classmates, and so forth. Keeping the "gift" a secret may make it easier to give.)

Interaction: Understanding

- What did you do?
- How did that help?

Interaction: Personalization

- How did you feel when you did your task?
- How do you feel now?

Additional Activities

Combine activities. Forcing Branches or Forcing Bulbs (pages 134-137) and give it to someone.

Activity 35—Environment

Fighting Back

Objectives

Being assertive is difficult for some. Through an understanding of nature's methods of assertiveness and protection, the participants may be better able to understand themselves and to be more assertive.

Setting

An area where each individual or small group can discover several plants and decide for themselves what that plant's protection is.

Materials

- An area where there are various plants or pictures of plants
- An area where various animals can be seen or pictures of animals
- Pencils
- Copies of the following for each person:

  At the top of a sheet of paper head two columns:

  Plant **Protection**

At the top of the back side of the same sheet of paper, label two columns:

Animal **Protection**

Special Considerations

Time: 30 minutes

Group size: Individuals or small groups

Process

- Find the plants and their protection.
- Write them down.
- (Do not pick plants. If the name is not known, describe the plant.)

Examples:

Plant	Protection
tree	bark protects tender growing wood
rose	thorns—stick large animals who might hurt or eat the plant
cat nip	strong smelling leaves to keep insects away
mullen	hairy leaves keep insects away
milkweed	bitter taste to keep from being eaten
thistles	prickers
sting weed	prickers
raspberries	thorns

- Look at the animals.
- Find their adaptations for protection.
- Write them down.

Animal	Protection
raccoon	claws, strong jaws, loose skin (so predator can not get grip); climbs
birds	fly
rabbit	coloring, holds very still or runs fast and zig zag
fox	quick, intelligent, and tricky

Interaction: Understanding

- Gather together and list the plants and animals and their adaptations against danger.
- Is it natural that living things want to protect themselves from danger?
- What sort of dangers do people face which they might need protection?
  - physical attack
  - verbal attack
  - dangerous situations
  - accidents
- Do people have adaptations to protect them from danger? List.
  - weapons
  - physical skills
  - biological—anger and flight
  - trickery
  - avoidance
  - fainting

- lying
- ability to reason and solve problems
- communication

- Are these adaptations OK? When?

Interaction: Personalization

- What are your adaptations to protect you from danger?
- Do you like what you do?
- How would you like to handle those situations?
- How can you develop different techniques?

Additional Activities

A follow-up might include assertive response techniques. Use "imagining" or role play to practice new responses.

Activity 36—Environment

Changes

Objectives

Life is a process. Changes are always occurring, but that does not make them easy to accept. This activity will help participants understand and accept change.

Setting

Discussion may be indoors, but at some time an outdoor setting is necessary.

Materials

Paper and pencil; information to be collected and listed under the *Process* section

Special Considerations

Time: If a walk to discover change is included here, 30-45 minutes; if the discovery of changes is done another time, 15 minutes

Group size: Individual or group

Process

Have participants take a walk and note changes that have just occurred or are occurring. (This may have been done on participants' way to or from school or the office or observed between visits.)

List changes:

- observed change
- cause of change
- effect of change

Discuss the changes you have discovered.

Interaction: Understanding

- What changes did you discover?
- What causes change? (some examples include: seasons; people, new buildings or street construction; nature, storms or decay; animals, digging or eating)
- Is change always good? Bad? (Point out that seldom is change exclusively either. A good example is the Yellowstone fire of

1990. Bad: loss of many trees, animals lives, tourist season. Good: renewal, new food and vegetation, big tourist draw.)

- From your list, find changes you consider good and bad.
- What would happen if no changes took place?
- Can you predict changes?
- What are some changes that happen in peoples lives? (divorce, death, moving, injury, hair cut)

Interaction: Personalization

- Have you had any changes in your life? What?
- Were they good changes? Bad changes?
- How do you feel about changes?
- What changes would you like to make?

Additional Activities

As a follow-up participants could discuss goal setting and behavior changes could make plans to set goals and change behaviors.

Activity 37—Environment

Hand Wave Voting

Objectives

Changes in personal behavior sometimes occur after someone points out an inconsistency in our lives. Sometimes just hearing another point of view is enough to encourage us to reflect on the way we think and act. Hand Wave voting is a good method to create awareness of issues which invite further thought. It also gives you a look into the participants' thoughts.

Setting

Where a group can sit and be comfortable.

Materials

None

Special Considerations

Time: 20 minutes

Group size: A large group (Questions can be asked of an individual.)

Participation in this activity should be limited to people who are aware of the issues. Questions can be reworded or simplified for a young audience.

Process

Read the following list of prepared questions so that you and the members of your group have a chance to indicate your position on each.

- If you strongly agree , wave your hand wildly in the air.
- If you are against the idea or you disagree, then signal with your thumb in a lowered position.
- If you wish to pass on the question or are undecided, fold your arms.

These questions could also be answered on a continuum. The participants will move to the place on the continuum representing their position on the questions. Lay the continuum out on the floor in a large area.

Strongly agree Moderate response Strongly disagree

1. How many of you enjoy being outdoors?
2. How many of you have been for a walk in the woods at night?
3. How many of you have been camping?
4. How many of you have read or studied about environmental issues?
5. How many of you believe that animals that are pests (too many of them) should be eliminated?
6. How many of you have changed your style of living within the last year to improve the environment?
7. How many of you pick up litter?
8. How many of you have become involved in an environmental issue?
9. How many of you try to reuse or recycle paper?
10. How many of you worry about the destruction of the earth?
11. How many of you believe in population control by laws saying "not more than two children per family"?
12. How many of you turn the water off while brushing your teeth?
13. How many of you believe there will be people on earth in 1,000 years?
14. How many of you worry about poaching?
15. How many of you eat at fast food restaurants?
16. How many of you believe toxic waste should be sent into space?
17. How many of you believe it is necessary to "manage" wildlife by hunting?
18. How many of you believe that people will find a way to save the earth?
19. How many of you use insecticides around the house?
20. How many of you believe nuclear power plants should be banned?
21. How many of you believe that what schools teach can change the behavior of students?
22. How many of you think that more government controls are needed to protect the environment?

23. How many of you have ever written a letter about an environmental issue?
24. How many of you think that children are more concerned about the environment than adults?
25. How many of you believe that the earth is over populated?
26. How many of you recycle grocery bags?
27. How many of you separate your garbage?
28. How many of you worry about the ground water you drink?
29. How many of you believe that it is important to treat livestock humanely?
30. How many of you are concerned about chemicals in food?
31. How many of you know where the rain forests are?
32. How many of you believe pesticides should be banned?
33. How many of you would like to ban strip mining?
34. How many of you believe that people are responsible for pollution?
35. How many of you believe that our natural resources will never run out?
36. How many of you believe that crowded urban areas can cause alienation and psychological damage to people?
37. How many of you are conscious of the fiber origin of your clothes?
38. How many of you know your car's impact on air pollution?
39. How many of you think that science and technology will produce enough food to feed the world's hungry population?
40. How many of you believe government owned wilderness land should be set aside and protected?
41. How many of you know the name of an animal that is on the endangered species list?
42. How many of you know an animal that has become extinct within the last year?
43. How many of you join carpools?
44. How many of you believe it is necessary to control the number of people visiting our national parks to preserve the parks?
45. Have you ever considered not eating meat?

Interaction: Understanding

- Did you all agree on how you felt about all of these questions?
- Were there certain issues where most of the people agreed? What were they?
- Were there some group members who never voted? What might this tell you?

Interaction: Personalization

- Were you ever the only one in an extreme position?
- How did you feel when you were the only agree or not agree vote?
- Did you ever vote opposite to what you would have liked to vote?
- If we did this activity in five years, would your responses be the same?
- Choose one of the values that you would like to change about yourself. Make a plan for changing it.

Activity 38—Environment

Cemetery Rubbings

Objectives

Cemeteries and death often have a negative connotation. This activity offers the participants a low risk opportunity to talk about life and death and to become familiar with cemeteries and burial in a positive way. The participants will also have an opportunity, directly or indirectly, to examine their own immortality.

Setting

A cemetery, preferably an old one, or a pet cemetery. Some of this activity will be done later in an office.

Materials

Newsprint; masking tape; crayons, without paper wrappings

Special Considerations

Time:

- One hour for the field trip to the cemetery
- One hour to develop a story
- Time to share and discuss

Process

Participants select a tombstone that interests them. They tape a piece of newsprint over the tombstone and rub it with the side of a crayon. Later, the participants can put together the history of their person. As much of the story as possible must be based on the facts they have gathered. Additional information may be made up, but must be put together realistically with the facts. The participants may be able to relate information to epidemics, accidents, fires, and so forth if the dates of a particular family are close together. Perhaps the participants may want to draw a picture of their person or family.

Interaction: Understanding

- Why are there cemeteries?
- Are there any other methods of dealing with persons after they die?

- Have you known anyone who has died?
- What other rituals are used when a person dies?
- What information have you discovered about this cemetery?
- What person did you choose?
- What interesting facts did you discover about that person?

Interaction: Personalization

- How did you put your material together?
- What kind of person did you choose? What was death like for this person? (Death does not always have to be tragic. Death is sometimes a friend.)
- What do you think will happen (or want to happen) to you when you die?
- Design your own grave stone or memorial marker. What will you want it to say?

Additional Activities

Additional study of methods of celebrating death may be pursued. The participants may plan their own burials or write their own epitaphs.

Activity 39—Environment

Issues

Objectives

This activity will help participants clarify their personal values concerning the natural environment. Sharing views aids further clarification and growth of personal identity.

Setting

Any place

Materials

Copies of the alternative issues

Special Considerations

Time: 20 to 45 minutes

Group size: Groups of three to five, can be adapted for individuals

Process

Hand out a list of alternative issues to each participant. Have each participant rank the alternatives in order of their importance to the participant. The most important issue is number one and so forth. Then have the participants form groups of 3 to 5. Each group will decide which is the most important issue. Perhaps the groups can imagine they are an important group of government officials or world leaders choosing the issue they will solve for the entire world.

List 1	List 2	List 3
pollution	greenhouse effect	wildlife and habitat
ozone depletion	saving the rainforests	acid rain
population control	violence and crime	disease control
birth defects	drugs	recycling
hunger	nuclear war	Alaskan Pipeline
animal rights	toxic waste	bad governments

Interaction: Understanding

- Discuss the issues briefly before ranking them. Without giving opinions, share information about the issues.
- These are large issues; how do they affect individuals?
- What contributions can individuals make toward solving these issues?

Interaction: Personalization

Personalization takes place within the group discussions when individuals share their own views, listen to others, and try to come to an agreement.

- How do these issues affect *you* in your daily life?
- What can you do personally to aid in solving these issues?

Additional Activities

Participants may want to learn more about the issues. They might make bulletin boards or displays about these issues. Participants might want to write letters expressing their views on these issues.

Additional References

Hollender, J. (1990). *How to make the world a better place, A guide to doing good.* New York: Quill William Morrow. .

Activity 40—Environment

Life's Questions

Objectives

The participants will have an opportunity to experience solitude and to reflect on the four basic life questions. The participants will further discover and use the resourcefulness that is within each of them, instead of constantly seeking gratification outside of themselves (through other people, food, Nintendo, drugs, alcohol, or work.)

Setting

A comfortable place outdoors or inside where each participant can be alone and free from distraction.

Materials

- 5" x 8" lined index card for each participant
- Pencil or pen
- Relaxing musical tape if exercise is done inside
- Printed on the blackboard or large tag board:
  - Who am I?
  - Why am I here?
  - How can I help? How can you help me?
  - What really matters?

Special Considerations

Time: 20 to 30 minutes

Group size: One individual to a large group

Process

Explain to the participants that these are four basic life questions which are the same for everyone. The responses, however, of each person will be original because each person is a unique individual. Because it is important to take time to reflect, to be alone in the quiet part of ourselves, the participants will spend a few minutes alone, reflecting on these questions. Participants will write down on their cards whatever responses come to them for the four basic life

questions. Explain that although there will be a sharing time, these are personal and the participants will not have to share unless they choose to.

If you are inside, play the music for ten minutes while the participants reflect and write.

Interaction: Understanding

- Why is it important that each individual learn to discover and use the resourcefulness that is within, instead of always seeking gratification from without (through other people, food, Nintendo, drugs, alcohol, work, and so forth)?
- Why is it important to take time to reflect?
- How do the answers to these question influence our lives?

Interaction: Personalization

- What were the answers to your questions? (The participant may not wish to share.)
- Are the answers congruent with the way you live? How? Why not?
- What can you do to make them more congruent?

Additional Activities

Activity 41 follows this activity well. Have participants set goals for themselves and make a commitment to that goal.

Activity 41—Environment

Contract of Commitment

Objectives

Participants will be able to set some personal goals.

Setting

Any place where the participants can be alone without distraction.

Materials

A copy of the contract for each individual; pencil or pen

Special Considerations

Time: 20 to 30 minutes

Group size: Any size

This activity is best after study or reflection on environmental issues.

Process

Explain to the participants that to make changes in the world, each individual must make personal changes. Taking into consideration what the participants know about the environment, environmental issues, and their own personal life styles, have each participant make a commitment for changes in one's life style in the future. The goals of that commitment must be reasonable and constructive. After brainstorming ideas for goals as a group, the participants will fill out their own contracts.

The group leader will decide whether to:

- Use this activity as a closing activity and have the participants keep their contracts;
- Have the participants share their goals of commitment;
- Collect the contracts and refer to them later.

Interaction: Understanding

- What is meant by reasonable goals?
- What ideas do you have for goals?

Interaction: Personalization

- What is your personal goal?
- How will this affect or change your current life style?
- How important is it for you to keep this contract?

Copy of Contract of Commitment

for _____

In order to help our world situation, I, a person who has many interlinking relationships in this world, do promise in a very personal way to:

_____

_____

_____

_____

_____

_____

Your Signature

Chapter 11

Guidelines for an Animal in the Office or Classroom

Laws and Rules

Federal Law

It is a federal law that any person working with wild animals that are endangered or migratory must have a Federal Education Permit from the Department of Natural Resources.

State Law

In most states:

- There are laws covering service animals that accompany handicapped persons.
- Animals are not allowed in food preparation or food service areas.
- Animal bites must be reported to the Public Health Department.
- There are also laws governing animals in public institutions and public places.
- To find out what your state laws are, contact a state congress representative, the local library information service, or the Humane Society.

Institutional Rules

It is important if you are planning to take an animal into an institution or public place to first find out the rules and policies and to obtain permission.

Most school policy's state that the animal must be safe, under control or in a proper container, and have permission to be in that institution.

Here is the policy of one school system about visiting pets or animals.

- The animal must be safe.
- The animal must be under control or in an appropriate container or enclosure.
- The person bringing the animal must have permission to do so.
- The animal is a "visitor" and will stay only an agreed upon or short amount of time unless other arrangements have been made and approved.

It is important to be sensitive to the visiting animal. If the animal is unduly stressed or uncomfortable, the visit needs to end.

Guidelines

1. It is important that you are established and effective in your counseling or teaching role before incorporating pets into the office or classroom.
2. You must *feel comfortable* and confident with the animal and the situation. You must always be aware of what is going on and always be in control.
3. The *administration needs to be aware* of what is being done and approve the activity. This is why it is important for you to be knowledgeable about animals and animal assisted therapy, and be prepared to convey the information to the administration.
4. You are *liable*. Check with your insurance agent for information. If you feel the response has been inadequate, continue checking with other companies. Insurance companies have different ideas about coverage in this area. If a personal pet is involved, the personal liability coverage may be included as part of your home owners or home renters policies. Again, it is a good idea to clarify this with your insurance agent.

5. The *temperament and health of the animal* is important. A commitment to the animal's health is imperative. Dogs and cats should have current shots and a health-check up as well as "just be feeling good." Be prepared to visit a veterinarian if the need arises. Even when fish are sick,, they need to be cared for in the most humane way possible.
6. You are a *role model*. What others learn is what they see you doing. You are teaching about caring for others, animals and people. If error is made, *error on the side of too much care. You can not teach too much compassion.*
7. A *proper environment* for the animal is essential. The animal needs an environment where it can be comfortable, remain healthy, and meet its needs. Choosing that environment and helping others to understand why you chose it is a tremendous opportunity for teaching empathy as well as scientific knowledge.
8. If *death* occurs, treat it as any loss. Be as honest as possible. Model appropriate feelings. Follow the needs of the group. Talk about the death. Allow for grieving. If some individuals are more traumatized than others, work with them alone. There is a place for humor, but not disrespect. Stop disrespect immediately. "Doing something" appropriate with the body may be important. Even "flushing" it (fish) is OK if handled appropriately! A full blown traditional funeral may not be appropriate and under most circumstances, creative alternatives may be found. (The book *The Tenth Good Thing About Barney* by Judith Viorst is an excellent resource.)
9. *Humane treatment* and respect for the animal are essential. A scared or uncomfortable animal needs to be relieved of the stress immediately.
10. Never speak harshly to an animal, *discipline* the animal harshly, or strike an animal. You are a role model. If the animal needs such discipline, the animal is not appropriate for the situation.
11. If the animal is *not suitable* for the office or classroom, change the situation or the animal. For example, if a hamster is a biter, and continues to be one, something is wrong. Talk with the children about why the animal bites. Draw up new rules with the help of the children so the animal will not be in a position to bite. Perhaps simply not handling the animal is a solution. ***If an animal is dangerous, it does not belong in an office or classroom.***

Working to find the best alternative is imperative. Be honest about the situation. There will be concern about where the animal will go and what will happen to it. This is an opportunity to stress the responsibility of careful selection, responsible and knowledgeable rearing, and commitment to the animal.

12. Never assume an individual knows how to *interact* with or handle an animal. Affinity between animals and children is natural, but often children need direction or information about what to do and how to do it. Also, you never know who else has "modeled" human-animal interaction for the individual.
13. You are ultimately *responsible* for the animal. Before you leave, check the animal, the food, and the equipment.
14. If you cannot be there, make arrangements with some other adult to check for you. Sending a classroom or office pet (the typical caged rodent or bird) to different homes on weekends is not always a good idea. This can be very stressful for the animal. If arrangements can be made for a custodian to feed and care for it on *weekends or short vacations*, leaving the animal in the office may be best.
15. If *sending the animal home with children* is the only alternative, make up a guidebook of care and handling. Be sure to talk to a parent or adult yourself about proper care and handling. Leave your name and number or the name and number of another responsible person if problems arise. Many positive things can come from this if it is handled carefully.
16. Be aware of the *problems* you may encounter and prepare for them in a preventive manner. The way you handle problems is very important. Don't become overly excited. Always remember you are a role model.
17. It is illegal in most states to keep a wild animal in captivity, but at times wild animal (snakes, turtles, and so forth) do end up in the classroom. Do not allow anyone to touch or handle a wild animal. Unknown disease or wounds can be avoided this way. The wild animal will be stressed by handling.
18. If any abuse occurs to any animal in the office or classroom, deal with it immediately and in a demonstrative manner. Abuse cannot be accepted. The animal may be taken from the room for a period of time and new rules established to emphasize the importance of kind and gentle care.

In the Beginning—The First Week

When an animal is introduced into a classroom or office, the introduction and first few days will set the tone for the entire experience. Here are some suggestions on what to do with those first few days. It takes a conscious effort to really "make it work."

- Introduce the animal right away. It is not an "object" but a vital part of that space. In a classroom, this can be done with the group, in an office introductions need to be made individually. Treat the animal much the way a new student would be treated by the classroom.
- Be very clear about initial expectations! It is fair to ask that the animal not be handled at first, until everyone gets to know everyone else or until the animal feels comfortable in the new surroundings. Write expectations down as well as talk about them.
- Talk about how the animal feels:
  - being in a new place
  - being so small with so many strange giants around
- Ask if they have ever felt that way
- Decide what you can do to make the animal comfortable
  - move slowly and calmly
  - talk when approaching
  - refrain from grabbing or handling at first
- Name the animal and refer to the animal by that name. Naming animals give them an air of respect as well as taking away from the "object" image.
- Do some research on the animal. Read a book to the class or have the book available in the office. Have individuals look up information about the animal and share with the class or with you. (In an office, a poster could be made about one facet of the animal's natural history or care.)
- Model the attitude and interaction you want others to have.
- Share little stories about what you have observed the animal doing. This will model observation behavior and be one way you can share about the animal.

- At first, set aside time daily or at each session to talk briefly about the animal. Share a story or fact or let others share a story or fact.

As time goes on, these suggestions do not need to take place as often, but should continue periodically.

- After the initial introduction, set up a plan or system for care.
  - Put students or clients into small groups or committees for cleaning and feeding.
  - The first time, model for the entire group. Then, model again for each group their first time.
  - Special care needs to be given the animal during the cleaning time so it does not become frightened or traumatized. Explain this.
  - Have a small container to put the pet into while the cage is being cleaned.
  - If students or clients goof off, they are given a choice of being careful or leaving.
  - Make this committee special by your presence and positive comments.
  - A responsible adult needs to always be near during care-giving time.
  - Write down simple directions and steps for cleaning and feeding.

  Continue to include the animal in activities during the year.
- Write or make up stories about the animal.
  - What if you were that animal. . .
  - Give the beginning of a story. . .
  - Write in journals about the animal. . .
- Have a celebration focusing on the animal.
- Continue sharing time focusing on the animal.
- Special time with the animal can be a special privilege.
- Introduce the animal to class visitors.
- Give the animal special gifts. (Some goodies, new toys)
- Study habitat, behavior, and natural history of your animal and others.

- Introduce new things for the animal (new cage, new toys, new food) and just observe.
- If the animal is in a classroom, incorporate the animal into other subjects like math.

Breeding Your Office or Classroom Pet

- Due to lack of responsible homes, eight out of every ten puppies and kittens born in this country end up being euthanized. There is a drastic over-population of unwanted animals. This is a tremendous lesson in responsibility, family living, and values. Have speakers from the Humane Society share some of the uncomfortable facts with your class or write to the Humane Society of the United States for literature. Post the information.
- If the birth of young is your choice, make that choice only after thorough examination of all of the consequences. Have a plan for off-spring care before the decision is made.
  - Responsible homes must be found for the young.
  - Be prepared for all possible situations. For example, sometimes hamsters and gerbils eat their young. This may be because of the stress of confinement, inbreeding causing week instincts, or there is some problem with the young.
  - Sometimes animals die giving birth.
  - Have alternate plans if the ones you make do not materialize

Think About What You are Teaching

Animals Used in Science Projects

- Is the project going to yield critical information that children can learn in no other way?
- Are the animals involved hurt, poorly fed, or deprived of any of their basic needs?

Recommendations:

Many projects can be done in which the animal is treated humanely. Modify your project or choose one of these.

For information and project ideas on animals used in school science projects, write to:

Humane Society of the United States
2100 L. Street NW
Washington, D.C. 20037
(202) 452-1100

American Humane Society
P.O. Box 1266
Denver, CO 80201
(303) 695-0811

The American Society for the Prevention
of Cruelty to Animals (ASPCA)
441 East 92nd Street
New York, N.Y. 10028
(212) 876-7700

Insect Collection

Do we teach the beauty, worth, and marvel of insects then ask the children to kill them for the sake of identification? For young children, instead, teach value and respect by asking them NOT to kill what should be valued and respected!

Recommendations:

Co-op learning groups photographing several insects can encourage children to look more intensely at the "subject" than when normally catching and killing it. The cost of a well planned project is minimal.

- Have the children draw or sketch the insect in its habitat.
- Develop an indoor habitat for a live insect. Keep it a few days and release it.
- Collect and hatch cocoons indoors and release the butterflies.
- In the field, observe live insects. Have children give their own creative names to the insect. Then look up the insect in a field manual for correct name.

- Teach observation skills and have children observe an insect they identify for 10 minutes and report on its activities.
- Discuss the values involved with why or why not kill insects. When might it be necessary? Is it ever harmful?
- Discuss, do insects feel anything? Experiment by holding an earth worm in plastic forceps and threatening to cut with a pair of scissors. What does the worm do? What might its behavior indicate? Do not cut the worm: release it.

Creepy Crawlers in the Classroom

Frogs, snakes, and turtles are wild animals. It is illegal to keep these animals in captivity. It is doubtful, however, that you would get into serious trouble for having one of these animals in the classroom, however, it may set a bad example for the children.

Recommendations

- Contact a local conservation officer for permission to keep these critters.
- Create a natural environment for the animal that is adequate to meet its needs.
- The Humane Society encourages "The Twenty-Four-Hour Rule." ***If you must have these critters in hand, keep them in a natural environment. Keep them for only twenty four hours or less. Release them where they were found, or in a similar environment. Teach this to your children by your words and your example.***

Reference: Hampton, C.H., Hampton, C.D., Kramer, D.C., and others. (1986). *Classroom creature culture: A collection of columns from Science and Children.* Washington, DC: National Science Teachers Association (1742 Connecticut Ave, N.W. 20009).

Office or Classroom Pets
A Guide

This section is designed to be a guide to aid in choosing an office or classroom pet. It is not designed to be a care manual. After you have chosen an animal please get a good care manual for that animal.

Amphibians

Frogs, toads, salamanders, newts, turtles, alligators

Environment: Terrarium: glass-sided box with movable lid of glass with vents or screen. For one or two small amphibians, the terrarium may be 1 foot x 2 feet by 2 1/2 feet (higher for jumpers). Use sand, gravel, moss or whatever is natural environment for particular species—half water, half land, usually (but for horned toad, all sand). Build-yourself directions are in *Compton's Encyclopedia*.

Other equipment: Something for animal to hide in: artificial light and heater if the room is not the right temperature (usually 60-75 F.). Plants.

Notes on Care: Keep the water clean, siphon off sediment and add fresh daily. Feed with live worms and insects.

Responsive? Yes, but subtle. Most amphibians do not like to be handled. Occasionally an amphibian will eat from a person's hand. Amphibians are usually nocturnal. They are interesting to look at.

Further notes: It is against the law to keep wild animals as pets. If an amphibian is brought from its natural habitat, follow the Humane Societies 24-hour rule and release the animal. If you intend to keep a wild amphibian in the classroom please check with a conservation officer who may give you "permission" to do it under that office's auspices. Although you will not likely get into "trouble" for keeping a wild amphibian in a terrarium, the example you set will carry over to other wild animals. Amphibians purchased at a pet store are legal to keep. Often these are exotic animals, wild animals that are imported. Although they do not ordinarily thrive in captivity, if set free, they would not survive. You need to be aware of this: children will ask. (The issue of importation of exotic animals may be worth looking into.)

Reference: Hampton, C.H., Hampton, C.D., Kramer, D.C., and others. (1986). *Classroom creature culture: A collection of columns from*

Science and Children. Washington, DC: National Science Teachers Association (1742 Connecticut Ave, N.W. 20009).

Snakes

Snakes taken from the wild are illegal to have in a captive situation. Snakes must be purchased from a pet store.

Environment: Wooden box (or terrarium) with glass front and wire mesh top that locks, 2' x 3' x 1' for several small snakes. Big snakes need a box as long as their own length.

Other Equipment: Clean gravel and sand. Shallow pan for water bath. Hiding places such as a flower pot, rock to rub against, tree branch.

Notes on care: Needs sun one hour per day. Feed once a week. If preferred live food is not available (frogs, mice, worms, bugs), train to eat meat.

Responsive? Yes, subtly. They can be handled gently. Snakes are very interesting to watch, especially when shedding. (Do not touch them then.)

Further notes: A snake may give off unpleasant odor when frightened. Many snakes hibernate during the winter.

Turtles

The only turtles legal to keep are those purchased at a pet store. Investigate your turtle thoroughly so you are sure what kind of turtle you have and what its needs are.

Environment: Terrarium. No top is necessary. Allow 1 square foot per 4 inch turtle. Water content depends on whether the turtle is a water turtle or a land turtle.

Other equipment: Light (60 watt bulb) 8" to 10" above dry rock. Needs light 8 hours a day. Bottom heater (heating pad under the container) is necessary for good digestion. A filter system.

Notes on care: Needs warm water (75-80° F). Food depends on the kind of turtle and the age. Most turtles will eat one to three times a year. Common foods include meat, fruit, and vegetables. The water or feeding space must be cleaned when the meal is over (about 2 hours after feeding). Supply extra calcium with cuttlebone or bone meal. Sunlight must be available to aid in Vitamin B production. Often turtles will go for a long time without eating.

Responsive? Yes, subtly. Fun to watch.

Further notes: A book recommended for turtle care is: *Step by step with turtles*. Neptune City, NJ: T.F.H. Publishers, Inc. (211 West Sylvania Ave. 07753).

Lizards

Chameleon, horned toad, iguana. These need to be purchased at a pet store, it is illegal to take them out of the wild.

Environment: Terrarium. Add sand, gravel, water bath, plants. Try to recreate the natural environment, desert or bog, accordingly.

Other equipment: Light heater to keep temperature around 80° F. Plants (for drinking water), tree branch.

Notes on care: Spray water on plants (lizards won't drink from dish). Catch soft insects (or buy live meal worms) for feed. Provide sun and warmth, also hiding place or shade. Lizards feed themselves if live insects are put into the box. Replenish as necessary.

Responsive? Yes, subtly. If handled gently will respond. Fun to watch.

Insects

Ants recommended

Environment: Glass box 8" x ll" x 1/2" can be bought or made with ordinary glass and masking tape. (Easy directions in *Compton's Encyclopedia*.)

Other Equipment:

Black cover (cardboard is fine) so ants have underneath darkness except when you watch them.

Notes on care: Keep the soil moist but not muddy. Feed about a drop of honey a week if you have started with real earth from an anthill.

Responsive? No, but fun to watch.

Further notes; For "caught" bugs and how to keep them, look for resources in the library. Rule of thumb, provide them with a "natural environment," "natural food," and ventilation. Release again within 24 hours.

Fish

There are over 500 kinds to choose from. Hardiest and cheapest are the goldfish.

Environment: Straight-sided glass tank, allow 1 gallon water and 24 square inches of surface per inch of fish (not counting the tail). Rocks in the bottom. Spare bowl or tank for cleaning, sick, or young fish.

Other equipment: A good filter and pump for cleaning and aeration helps eliminate a lot of cleaning. Light, but not sunlight. Rocks (buy them, some that are collected are poisonous or give off sediment). A heater may be needed for tropical fish, or for a setting with drastic temperature fluctuations.

Notes on care: Crowding, over feeding, and temperature changes are the biggest hazards. Feed dried foods daily, but only as much as is eaten in five minutes. Clean tank as needed.

Responsive? Fish are not handleable, but fun to watch. Some fish will respond to the presence of people and feeding.

Further notes: Starting with fish can be a hassle, but once they are set up they are little trouble.

Fish can be simple, or can become complex if you becomes involved with breeding. Lots of information is available on keeping fish.

White mice

Field mice are wild animals. White mice have been bred for domestic pets.

Environment: Cage made of metal (wood must be protected against gnawing). They need about 18 square inches per pair. Metal tray on bottom and things or a second story for climbing. Put newspapers on the top of the metal tray.

Other equipment: Ladder, exercise bar, gnawing board, trapeze, and other toys. Separate sleeping box attached. Attach water bottle. Dustless material such as pine shavings, pine needles, grass clippings or leaves are good for the cage bottom. Do not use sawdust. Cedar shavings are not recommended for gerbils. Shredded newspapers should be avoided also. The ink gets on the bottom of the animals' feet. Animals then lick it off as they clean themselves. Ink can be toxic.

Notes on care: Feed no sugar, salt, cheese, or meat. Feed twice a day, prepared food plus oats, bread, occasional vegetables, bread, milk, fruit. Protect from drafts. (70° F is best). Keep clean.

Responsive? White mice can be handled gently. Many are responsive to gentle handling. Mice are trainable.

Further notes: The main disadvantage is odor, especially if they are not kept clean and are not in a ventilated place. Two females can be kept together, but not two males. If space is overcrowded or the mice are not fed enough, they will become cannibalistic. Mice are prolific!

Hamsters—Gerbils

A variety of colors and fancy breeds are available. Hamsters are usually a bit larger and calmer than gerbils. Gerbils have long tails.

Environment: Cage of metal and wire (will gnaw out of wood). Allow 1 square foot for each hamster, but cage should be a minimum of 2' x 1 1/2' x 1'. Cages with tube trails are nice.

Other equipment: Dustless material such as pine shavings, pine needles, grass clippings, or leaves are good for the cage bottom. Do not use sawdust. Cedar shavings are not recommended for gerbils. Shredded newspapers should be avoided also. The ink, which can be toxic, gets on the bottom of the animals' feet. Animals then lick it off as they clean themselves. Change bedding weekly. Gravity feed water bottle, exercise wheel, and gnawing board are available at pet stores. Use a glass jar for litter. (See further notes.)

Notes on care: Feed once a day a prepared mix of rabbit pellets, bread, nuts, fruits, and vegetables. Avoid damp and draft. Temperatures 50° F to 80° F best. Given food and water can be left alone several days.

Responsive? Yes, they can be very friendly. They are very handleable if handled gently. They do not have to be handled to be a good addition to the office or classroom. They are fun to watch. Individuals may need to be taught how to appropriately handle a particular animal.

Further notes: Hamsters have no odor if kept clean. They can be "potty trained." Put a glass jar (mug size) in a potty corner with a few soiled shavings in it. Clean the potty often; cage less often.

Guinea Pigs (Cavies)

A variety of colors and short-haired and long-haired "pigs" are available.

Environment: A hutch (like the rabbits), or a tub (round or square plastic wading pool) is good. You do not need a top if kept indoors. 3' x 3' per pair. "Pigs" do not need or like lots of space.

Hardware cloth or mesh floor with papers underneath is easiest to keep clean, but newspapers on the bottom of a tub work well.

Other equipment: Manger for hay to eat, salt block, sleeping box, gnawing board.

Notes on care: Protect from the cold (below 65° F.) Long hairs need grooming. Feed twice a day, pellets plus carrot or dampened oats, clover, hay, greens. Leave food in cage, pick up old greens when new ones are added. Dustless material such as pine shavings, pine needles, grass clippings, or leaves are good for the cage bottom. Do not use sawdust. Cedar shavings are not recommended for guinea pigs. Shredded newspapers should be avoided, also. The ink gets on the bottom of the animals' feet. Animals then lick it off as they clean themselves; ink can be toxic. When held "pigs" will scratch, also they may go to the bathroom. Handle with a towel under them; this makes the handling less stressful for everyone. Cage needs to be cleaned often, even daily, or will begin to smell.

Responsive? Yes, very. Will whistle on call or when food approaches, or when the "pig" desires attention. Handle gently, and best with a towel under them to protect against scratches and elimination. Fun to watch.

Further notes: Keep in pairs of same sex. To breed put 1 male with 2 or 3 females. Unlike hamsters, "pigs" get lonely if alone.

Rabbits

There are many colors and styles of domestic rabbits to choose from. Wild rabbits are illegal to keep and will not do well.

Environment: Hutch 3' x 1 1/2' x 2' per adult built on posts and waterproofed against outdoors (dampness is a big problem). Build as large a run as possible so the rabbits can exercise. Build with fine wire mesh. Some hutches are kept indoors with pans and newspapers under the wire.

Other equipment: Straw or shavings on floor; a thick layer in cold weather. Change this daily. (Scrub and disinfect hutch weekly. Sanitation is vital.) Need a water bowl that will not tip. Some rabbits have special needs, like chinchillas which take a daily "dust" bath as heat protection.

Notes on care: Feed twice a day, pellets plus carrots or dampened oats, clover, hay, greens.

Responsive? Yes, friendly. Depends on the individual. Fun to watch.

Further notes: Rabbits can be litter trained or "house" broken. Also rabbits can be trained to walk on a leash. It is definitely worth finding out more about this and keeping your rabbit inside. Contact your local library or pet store for further reference, or ask around for someone who has done it!

Birds

Canaries, parakeets, parrots, myna birds, soft-billed birds.

Environment: Cage, oblong and roomy (2' x 2' x 2' for one small parakeet). Removable perches (for cleaning). No loose or bent wires, chipable paint, or rust.

Other equipment: Food and water cups, bath dish, toys, mirror (if no mate), gravel or grit, treat cup, cover for cage (to simulate night and induce sleep).

Notes on care: Protect from drafts. Be vigilant about parasites. Watch feeding habits carefully (learn symptoms of boredom, disease, diet deficiency). Bathe: you may have to teach bird how. Give grit to all birds and learn the special food needs of your own bird. Parrots need fresh fruit; canary eat "warble", not "roller," feed; softbills want live insects; most need extra food during molting.

Responsive? Yes. Can be taught to talk, mimic, sing, do tricks, and so forth. Lots of fun to watch. Many birds love to play and tease.

Further notes: Birds are not easy to raise. Please get more information about the particularly species you have chosen.

Cats

Many kinds, temperaments, even sizes!

Environment: In a classroom or office a cat would have to have the run of the room most of the time. At times it can be crated, but these times should be limited.

Other equipment: Litter tray and litter, bowl for water and food, toys.

Notes on cats: Inoculate against distemper, rabies, rhinotracheites calici, and leukemia. Routine health checkups are important for a "public" cat. Ask veterinarian's advice on feeding. Decisions need to be made about spaying or neutering and declawing. Please consult your veterinarian or local Humane Society. (The Humane Society recommends spaying or neutering. Neutering or spaying is recommend at five or six months of age. Declawing is not recommended.) Indoor cats like grass or veg-

etables mixed into food.

Responsive? Yes! The temperament of a cat chosen for a "public" cat is important. Early experiences, socialization, and training are important for the role the cat will eventually play. It is best to start early with a carefully chosen kitten and train the animal yourself, or look for an older cat checking carefully into the background and history.

Further notes: An office or classroom cat is a commitment but can be a terrific experience if well planned and executed.

Dogs

Lots of breeds, sizes, temperaments!

Environment: A classroom or office dog needs to be an indoor dog. Being able to kennel it at times would be very helpful. A dog must be taken home with you at night, so home facilities are also needed.

Other equipment: Collar, leash, bed, grooming equipment, toys to play with and chew, dishes for food and water.

Notes on care: Dogs require licenses, vaccination against rabies, inoculations against distemper, parvo, and a preventative for heart worms. Check for parasites. Regular trips to the vet are necessary for a "public" dog. This is a monetary commitment as well as an ethical one. Decisions need to be made about spaying or neutering. Please consult your veterinarian or local Humane Society. (The Humane Society recommends spaying or neutering. Grooming and nail trims may also be necessary.

Responsive? Yes!

Further notes: If you wish to include a dog in the office or classroom first learn about the animal, work with it, and include it as part of your family. For help contact a person who is a behavior expert. The Delta Society (page 52) could help you locate someone in your area.

Farm animals

Special school projects with farm animals are also possible. Schools serving special populations often incorporate farm animals as part of their program. For more information on farm programs and farm animals used in a therapeutic or education way, please contact The Delta Society, see page 52.

Wild animals

It is possible for you to become involved as a wildlife rehabilitator or to work with a wildlife rehabilitator. For more information on wildlife rehabilitation or names of rehabilitators in your area contact:

National Wildlife Rehabilitators Association
RR 1 Box 125 E
Brighton, IL 62012

(telephone: 618-372-3083)

International Wildlife Rehabilitation Council
4437 Central Place
Suite B-4
Suisun, CA 94585

It is against the law to keep wild animals as pets. If an amphibian is brought from its natural habitat, follow the Humane Societies 24-hour rule and release the animal. If you intend to keep a wild amphibian in the classroom please check with a conservation officer who may give you "permission" to do it under that office's auspices. Although you will not likely get into "trouble" for keeping a wild amphibian in a terrarium, the example you set will carry over to other wild animals. Amphibians purchased at a pet store are legal to keep. Often these are exotic animals, wild animals that are imported. Although they do not ordinarily thrive in captivity, if set free, they would not survive. You need to be aware of this: children will ask. (The issue of importation of exotic animals may be worth looking into.)

Chapter 12

The Humane Society Project

This project is included as one example. There are many variations for towns or cities where a humane society is not located or cannot participate. Possible sources of animals could be a farm, a zoo, a petting zoo, a greyhound park or adoption center, a private breeder, or a pet store. Of course activities would have to be adapted to meet the needs of the animals and the establishment. Liability would have to be researched.

This project can be conducted during the summer or after the school day during the school year. In our project "At risk" children were selected based on their need, inappropriate behavior, low self esteem, and deprived environment. Children in the upper elementary grades seemed to work best. They are big enough to be able to do many things with the animals on their own. The children selected were children that said they really liked animals. The number of children selected depended on the number of volunteers available to work with the children (one volunteer assigned to each child was our ideal) and the available animal resources.

Each child was asked to sign a contract at the onset of the program. This contract outlined the program and the child's expected interactions, including the appropriate behaviors specifically stated.. In the contract, we stated that if the child did not meet the contract specifications on an individual visit, the child would be immediately taken home. On the next planned visit, the child would have

another opportunity to try. If a child was taken home three times, a conference would be held to determine if the program would continue.

Goals for the program were:

1. To provide a positive experience for each child.
2. To provide "successful" experiences for each child.
3. To provide a positive social situation with one-on-one interaction between a volunteer and a child.
4. To provide a good role model for the child.
5. To provide an opportunity to develop and explore an interest that the child has expressed.
6. To provide an opportunity for each child to learn useful skills.
7. To provide an opportunity for this interest to continue growing and these skills to continue developing.
8. To provide the opportunity for the child to interact with animals in a very positive way and to experience the benefits of the relationship.

To accomplish these goals the following took place.

1. A volunteer was assigned to work with a child. The volunteer met with the child at the Humane Society at least once a week. The volunteer was responsible for scheduling the trip, providing transportation, interacting with the child in a positive social manner, and providing a positive role model for the child.
2. The following took place at the Black Hawk Humane Society, Waterloo, Iowa.

   The child took part in a dog obedience class with older stray dogs up for adoption. This will make the animals more adoptable. It will also give the animals much needed attention.

   The child learned to wash and groom the dogs and cats and helped to bath and groom the older dogs.

   The child learned that cleaning and caring for the runs and kennels is important.

   The child learned about the purpose and activity of the Humane Society.

   The child had an opportunity to go on a animal assisted therapy visit.

The children learned about wildlife rehabilitation.

Other projects and opportunities were added as the opportunity presented itself.

At the end of the project opportunities for continuation were planned. Examples include: conferences from time to time with the volunteer, opportunities to volunteer at the humane society, or opportunities to share the experience in the classroom.

3. The project was evaluated by questionnaires given to the participating children and their parents.

This is an example of the letter sent to parents of the participants:

Dear Parent,

Your child has been selected to be part of a program conducted at the Black Hawk Humane Society this summer. The project is organized and directed by Linda Nebbe, the counselor at your child's school.

This program will consist of eight visits, approximately one hour in length, to the Black Hawk Humane Society. During these visits, your child will have the opportunity to work with dogs, teaching them obedience skills, learning to groom and bathe them, learning about care, and learning about the Black Hawk Humane Society.

The goals of this program for your child are:

1. *To enhance his/her self esteem through a positive, successful experience.*
2. *To give your child an opportunity to expand an already existing interest.*
3. *To teach your child skills which will have potential to be developed further and carried over into the child's daily life.*

A volunteer will be assigned to your child. This volunteer will set the schedule of the visits, provide transportation for your child, be a contact for you, and ensure a "positive" social and education experience for your child.

At the onset of the program, your child will be given a contract (attached) explaining to him/her what will happen in the program and what our expectations are of him/her. If this contract is "broken" it is explained that your child will simply be taken home that day and can "try

again" at the next scheduled visit. This will be done in a very positive and encouraging way. If there are three problem visits, then a conference is scheduled with your child to determine if he/she really wishes to be involved. A plan will be made to either continue or end involvement in the program.

To take part in our program, we need parental permission, and your signature giving us permission to contact medical help if an accident should occur and we cannot find you. Please sign below and return this form.

I give permission for _____ *to take part in the program described above.*

Parent's signature _____

Our family doctor is _____.

I give my permission for the volunteer working with my child to contact this doctor, or any doctor if he is not available, in case of accident.

Parent's signature _____

Sample Contract
Black Hawk Humane Society Program Participants

To take part in the summer program at the Black Hawk Humane Society, I must follow the following rules. If I do not, I will be asked to leave and immediately be taken home.

If I am asked to leave and taken home, I will be given another chance on the next visit. I will receive no more than three chances.

1. I will be ready on time. If I cannot go that day, I will let someone (whoever is picking me up) know.
2. I will wait patiently for my turn or for the next direction.
3. I will stay with my volunteer or the group.
4. I will listen to and follow directions.
5. I will do things the way I am told . (Even if I have learned a different way.)
6. I will not mess around, exchange "looks", make under-breath comments, make gestures, or silly jokes.
7. I will be respectful and polite to all people at all time (even if they are not polite to me).
8. I will use appropriate language at all time.
9. I will use appropriate voice at all times.
10. I will use the equipment appropriately.
11. I will not take or use anything without permission.
12. I will not interrupt or bother persons working.

I, _____, have read this contract and will abide by it. If there are any problems with it or grievances concerning its content, they can be discussed. If warranted, changes can be made. Until such changes occur, the contract will stand as is.

Student's signature _____

Counselor's signature _____

Humane Society Director's signature _____

The Program:

A volunteer who is a dog obedience class instructor taught the lessons on animal obedience. The lessons were based on positive reinforcement. Simple, basic skills were taught like sit, walk, do not jump up, and so forth.

Various employees of the Humane Society taught bathing, grooming, and kennel cleaning.

The children were told their work with the animals is important. These were animals that had been given up for adoption. Most of them were in need of attention as well as being taught manners! Because of the work the children were doing with the animals, the animals would be more adoptable.

The children were taught responsible pet care, including information on neutering, health care, stray animal laws, and euthanization.

The director of the Humane Society talked to the children about the role of the Humane Society.

A wildlife rehabilitator who volunteers with the Humane Society taught about wildlife rehabilitation.

'The volunteers in the Black Hawk Humane Society Project were volunteers with P.E.T. P.A.L.S., a animal assisted therapy group that was part of the Black Hawk Humane Society.

Evaluation of the Black Hawk Humane Society Summer Project

Attendance was 90% or better. This was excellent. Our schedule was somewhat flexible and three of the participants did not have telephones in their homes so sometimes coordination was difficult. Attendance depended mostly on the responsibility of the children involved to be ready to go.

- There were NO discipline problems. Only once did a child even have to be reminded of the contract!
- We observed changed behavior. The first day one of the children had a rather unruly puppy. He didn't know what to do. His foot was moving like he wanted to kick the puppy, but he knew he better not. Still, he didn't know what else to do! By the end of that day he had learned alternative ways to deal with the puppy (positive behaviors) and his foot never threatened again.
- A male volunteer noted that conversation the first couple times in the car with his boy included the boy bragging about conquests with "women," drinking, and bad language. The volunteer was instructed to ignore the conversation and change the topic to something more acceptable. The volunteer reported that this kind of conversation ended about the third visit and was replaced with discussion about the animals.
- At the Humane Society the five youth were cooperative and polite. They waited turns and said please and thank you. (This behavior was modeled by their volunteers.)
- Teacher comments after school began told of children taking about the summer program and what they learned and did. One teacher was impressed with the accuracy of the information. Other children in the classed asked the child questions and listened and learned from the answers. The teacher requested a way to continue the experience for the two boys in her room during the school year.

References

Allen, K. M. (1985). *The human-animal bond, an annotated bibliography.* Metuchen, N.J. The Scarecrow Press, Inc.

An Alternative to Outward Bound Programs. (1979). *Journal of Physical Education and Recreation. 50* (1), 26.

Arkow, P. (1982). *Pet therapy: A study of the use of companion animals in selected therapies.* The Humane Society of the Pikes Peak Region, Colorado Springs, CO.

Bach, R. (1977). *Illusions.* New York, NY: Delacourte.

Bankie, B. (1983). *A brief review of psychological theories and counseling techniques for outdoor leaders.* ED 244 752.

Baron, R. A. & Byrne, D. (1987). *Social psychology: Understanding human interaction. 5th Edition.* Boston: Allyn & Bacon, Inc.

Beck, A. & Katcher, A. (1983). *Between pets and people.* New York: Putnams Sons.

Beran, G.W. (1982, June). [Interview with George Beran, professor in the Department of Veterinary Microbiology and Preventive Medicine, Iowa State University: Ames, IA 50011].

Berne, E. (1964). *Games people play.* New York: Grove Press.

Berry, W. (1978). *The unsettling of America.* New York: Avon.

Blakesless, T. R. (1980). *The right brain: A new understanding of the unconscious mind and Its creative powers.* Gardin City: Anchor Press.

Business Bulliton. (1984,). *Wall Street Journal.* 7/19, 1:5.

Bustad, L.K. (1980). *Animals, aging, and the aged.* Minnesota:University of Minnesota Press.

Bryant, B. K. (1986). *The relevance of family and neighborhood animals to social emotional development in middle childhood.* University of California, Davis, CA 95616.

Caduto, M. J. & Bruchac, J. (1988). *Keepers of the earth.* Golden, Colorado: Fulcrum, Inc.

Chase, N.K. (1981). *Outward bound as an adjunct to therapy.* Colorado Outward Bound School, Denver Colorado. (ERIC Document Reproduction Service No. ED 241 204)

Childs, S. (1980.) *Adventure depravation, a social disease, self-concept through school camp.* (ERIC Document Reproduction Service No. ED 197-911)

Comstock, A. (1911). *Handbook of nature study.* London: Cornell University Press.

Copus, E. (1980). *The Melwood manual, A planning and operations manual for horticultural yraining and work co-op programs.* (ERIC Document Reproduction Service No. Ed 200793)

Coriseneau, C. (1979). The nature of adventure education. *Journal of Physical Education and Recreation.* 50 (l). (ERIC Document Reproduction Service No. ED 171-474)

Cornell, J. (1980). *Sharing nature with children.* Nevada City, CA: Anada Publications.

Cornell, J.(1987). *Listening to nature.* Dawn Publications.

Cornell, J. (1987). *Sharing the joy of nature: Nature activities for all ages.* Dawn Publications.

Corsini, R. J. & Contributors. (1979). *Current psychotherapies: second edition.* Itasca, Illinois: F.E. Peacock Publishers.

Corson, S. & O'Leary Corson E. (1980). *Ethology and nonverbal communication in mental health.* New York: Pergamon Press.

Cusack, O.(1987). *Pets and mental health.* New York: The Haworth Press.

Cusack, O & Smith, E. (1984). *Pets and the elderly, The therapeutic bond.* New York: The Haworth Press, Inc.

Crompton, J. & Sellar, C. (1981, Summer). Do outdoor education experiences contribute to positive development in the affective domain? *The Journal of Environmental Education.* 12 (4), pp.21-24.

Davis, J. H.(1986). Children and pets: A therapeutic connection, *The Latham Letter,* Vol. VII, No. 4. Alameda, California.

DeLuea, F., Kesir, L., & Frazier, K. (1978). Environmental education and the interrelationships among attitude, knowledge, achievement, and Pagetian levels. *Current Issues in Environmental Education.* 4, 189-192.

Dodson-Gray, E. (1979). *Why the green nigger?* Wellesley, MA: Roundtable Press.

Dreiser, T. (1939). *The living thoughts of Thoreau.* Philadelphia, PA: David McKay Company.

Dubos, R. (1972). *A god within.* New York: Charles Scribner's Sons.

Ekirch, A. (1963). *Man and nature in America.* New York: Columbia University Press.

Emerson, R. W. (1903). *Complete works of Ralph Waldo Emerson.* (Century Edition). Boston: Houghton Mifflin.

Flood, J. & McCabe, B. (1979). *Wilderness School staff report, 1978-79.* P.O. Box 2243, Coshen, CT 06756. (Eric Document Reproduction Service No. ED 175-582)

Final quantatative evaluation for 1971-72 Project Adventure. (1972). (ERIC Document Reproduction Service No. 173-059)

Fogle, B. (1981). *Interrelations between people and pets.* Illinois: Charles C. Thomas.

Fogle, B.(1982). *Pets and their people.* New York: Viking Press.

Ford P. (1981). *Principles and practices of outdoor/environmental education.* New York: John Wiley and Sons.

Fox, M. W. (1980). *One earth, one mind.* New York: Conward, McCann 7 Geoghegan.

Fox M. W. (1982). Can your pet make you sick? *McCall's,* May, pp. 44-46.

Gillis, H. L. (1985, July) *An active adventure for groups.* (ERIC Document Reproduction Service No. ED 260 879)

Glasser, W. (1984). *Control theory.* New York: Harper and Row.

Gonski, Y. A. (1986). *The therapeutic utilization of canines in a child welfare setting* 60-29 59th Road, Maspeth, New York, 11378, 1986.

Gonski, Y. A., Peacock, C. A. &, Ruckert, J. (1986). *The role of the therapist's pet in initial psychotherapy sessions with adolescents,* 34 Oliver Street, Watertown, MA 02172.

Graham, A & Graham, F. (1976). *The milkweed and its world of animals.* Garden City, NY: Doubleday & Company, Inc.

Greed & wildlife: Poaching in America. (1989, July 9). National Audubon Special. IPBN.

Greenberg, J. (1977). *Who loves you?* . Science News, Vol 112, August 27, 1977.

Griffin, W. (1981). *Eckerd Wilderness Camp.* Florida Wilderness Program, RIE. (ERIC Document Reproduction Service No. ED 204-041)

Griffiths, A. & Griffiths, L. (1976, January). Healing through horticulture. *Journal of Leisurability.* 3 (1), pp. 29-35.

Havinghurst, R.J.(1957). *Human development and education.* New York: Longmans, Green.

Heipertz, W.(1981). *Therapeutic Riding.* Greenbelt Riding Association for the Disabled, Inc. Ottawa, Canada.

Hessayon, D. G.(1980). *The House plant expert.* New York: Charles Scribner's Sons, New York.

Jones, B. (1981). *The psychology of the human/companion animal bond: An annotated bibliography:* Center for Interaction of Animals and Society of Veterinary Medicine. Philadelphia, PA: University of Pennsylvania.

Kidd, A. & Kidd, R. M.(1987). Abstracts of presentations, people, animals and the environment: *Celebrating new partnerships,* Delta Society Sixth Annual Conference, Oct. 4-6, 1987 Vancouver, B.C., Canada. (Psychology Department, Mills College, Oakland, CA 944613.'

Knapp, C. & Goodman, J. (1981). *Humanizing environmental education: A guide for leading nature and human activities.* Martinsville, IN: American Camping Association..

Lee, R. L. Zeglen, M. E., Ryan, T. & Hines, L. M. (198). *Guidelines, animals in nursing homes.* Delta Society, Century Building, Suite 303, 321 Burnett Avenue, South, Renton, WA 98055-2569.

Leopold, A. (1949). *Sand county almanac.* New York: Oxford University Press.

Levine, M. M. & Bohn, S. (1986). *Development of social skills as a function of being reared with pets,* (Summary) Abstracts of presentations living together: People, animals and the environment. Delta Society International Conference, Boston, MA, 27.

Levinson, B. (1962). The dog as "Co-therapist". *Mental Hygiene, 46,* 59-65.

Levinson, B. (1964). Pets: A special technique in child psychotherapy. *Mental Hygiene. 48,* 243-248.

Levinson, B. (1969). *Pet oriented child psychotherapy.* Springfield, IL: Charles C. Thomas.

Levinson, B. (1972). *Pets and human development.* Springfield, IL: Charles C. Thomas.

McDonald, Elvin. (1976). *Plants as therapy.* New York: Praeger Publishers.

McCulloch, M. (1982, Spring). Companion animals in human health. *Progress.* New York: Gaines Dog R.C.

McHarg, I. (1969). *Design with nature.* Garden City, NY: Natural History Press.

Magid, K. & McKelvey, C. A. (1988). *High risk: Children without a conscience.* Lakewood, CO: CDR Distributors.

Maier, H. (1965). *Three theories of child development.* New York: Harper & Row Publishers.

Malcarne, V.(1986). *Impact of childhood experience with companion animals on concern for humane and other animals.* (Summary) Abstracts of presentations living together: People, animals and the environment. Delta Society International Conference, Boston, MA, 128.

Malcarne, V. L. (1983). *NAAHE special report: Empathy and humane education,* The National Association for the Advancement of Humane Education, A Division of the Humane Society of the United States, Box 362, East Haddam, Connecticut 06423.

Malcarne, V. (1981). *The Effects of roleplay and maximization of perceived similarity on children's empathy with other children and animals.* Unpublished senior thesis. Stanford University.

Mander, J. (1978). *Four arguments for the elimination of television.* New York: Quill.

Matterson, R. (1982, June). Personal communication. Department of Horticulture, Waters Hall, Kansas State University, Manhattan, KA 66505.

Mills, J. (1978, April). The value of high adventure activities. *Journal of Physical Education and Recreation. 49*, 29.

Montagner, H. (1986). *Animals and children.* Universite de Franche-Comte, Faculte des Sciences et des Techinques, Laboratorie de Psychophysiologie, Route de Gray, 25030 Besancon F.

Montagu, Ashley. (1986). *Touching: The human significance of the skin*, Third Edition. New York: Harper & Row, Publishers.

Mortlock, C. (1979, April). Adventure education. *Journal of Physical Education and Recreation, 50.* (ERIC Document Reproduction Service No. 175-582).

Nebbe, L. L. (in press). The elementary school counselor and the human-animal bond. *The School Counselor.*

Nebbe, L. (1986). *P.E.T. P.A.L.S. training manual.* Black Hawk Humane Society, 1166 West Airline Highway, Waterloo, Iowa 50703.

Nebbe, L. (1982). *Nature therapy.* Unpublished manuscript. Iowa State University, Ames, Iowa, 50011, Department of Guidance and Counseling, Iowa State University, Ames, Iowa 50011

Nieberg, H. and A. Fischer. (1983). *Pet loss.* New York: Harper and Row.

Olszowy, D. (1978). *Horticulture for the disabled and disadvantaged.* Springfield, IL: Charles C. Thomas.

Owan, K. (1980). *Wilderness/adventure programs for juvenile offenders.* Chicago, IL: Chicago University. (ERIC Document Reproduction Service No. ED 196-589)

Patterson, C. (1980). *Theories of counseling and psychotherapy.* (3rd ed.). New York: Harper & Row Publishers.

Pearce, J. C. (1980). *Magical child.* Bantam Books: New York.

People, Animals, and the Environment. (1983, Spring). Bulletin of the Delta Society, International Correspondent.

People, Animals, and the Environment. (1984, Spring). Bulletin of the Delta Society, International Correspondent.

People, Animals, and the Environment, Delta Society Magazine (1987, Winter). 5(2).

Poachers. (1989, December 3,4,5). *Des Moines Register.* Sports Section.

Project WILD. (1985). P.O. Box 18060, Boulder, CO 80308-8060. (303) 444-2390.

Rae, W. & Stieber, D. (1976). Plant play therapy: Growth through growth. *Journal of Pediatric Psychology. 1* (4), 18-20.

Roth, R. (1976). *A review of research related to environmental education, 1973-76.* 1460 West Lane Ave., Columbus, OH 43221. (ERIC)

Roth, R, & Helgeson, S. (1972). Camping attitudes/behavior changes. *A Review of Research Related to Environmental Education.* 1460 West Lane Ave., Columbus, OH 43221. Columbus, OH: OSU, 1972, 28. (ERIC)

Ruckert, J. (1987). *The four-footed therapist.* Berkeley, California: Ten Speed Press.

Saltmarsh, B. (1986). *Neural linguistic programming.* Workshop presented at the University of Northern Iowa, Cedar Falls, Iowa.

Schweitzer, A. (1965). *The teaching of reverence for life.* New York: Holt, Rinehart, & Winston.

Serpell, James. (1987). *In the company of animals: A study of human-animal relationships.* New York: Blackwell News.

Silverstein, S.(1964). *The giving tree.* New York: Harper& Row Publishers.

Simon, S. B., Howe, L. W., & Kirschenbaum, H. (!972). *Values clarification: A handbook of practical strategies for teachers and students.* New York: Hart Publishing Company, Inc.

Soares, C. J. . (1986). Dogs in families, *The Latham Letter,* Vol. VII, No. 4., Alameda, California.

Sussman, M. B. (Eds.). (1085). *Pets and the family.* New York: The Haworth Press.

Swan, J. (1977, Summer). The psychological significance of the wilderness experience. *Journal of Environmental Education.* 8 (4), 4-7.

Synobodny, L. (1979, April). *Increasing self-concept through outward bound.* Paper presented at the annual international convention, Council for Exceptional Children, Dallas, TX. (ERIC Document Reproduction Service No. ED 171-009)

Teaching through adventure, A practical approach. (1976). Project Adventure, P.O. Box 157, Hamilton, MA 01936.

Thoreau, H. D. (1893). *Excursions.* Boston & New York: Houghton Mifflin.

Thoreau, H. D. ((1906). *Walden.* (Manuscript Edition). Boston: Houghton Mifflin.

Uhlein, G.(1983). *Hildegard of Bingen.* Santa Fe, New Mexico: Bear and Company.

Van Matre, S. (1972). *Acclimatization.* Bradford Woods, Martinville, IN: American Camping Association.

Van Matre, S. (1974). *Acclimatizing.* Bradford Woods, Martinsville, IN: American Camping Association.

Van Matre, S. (1980). *Sunship earth.* Bradford Woods, Martinsville, IN: American Camping Association.

Viorst, J. (1973). *The tenth good thing about Barney.* New York: Atheneum.

Wallin, P. (1978). *Pets and mental health: Some psychological perspectives on pet ownership.* Minneapolis, MN: University of Minnesota.

Watson, D. & Burlingame, A. (1960). *Therapy through horticulture.* New York: MacMillan Company.

Webster's new collegiate dictionary. (1989). Springfield, MA: G. & C. Merriam Company.

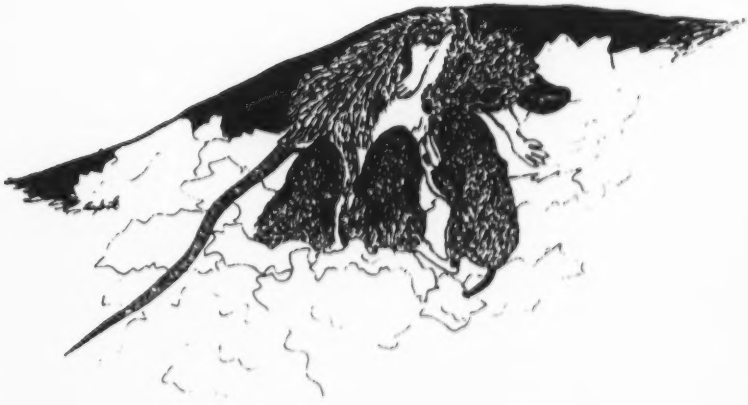
Welton, G. (1978, April). Natural freedom and wilderness survival. *Journal of Physical Education and Recreation.* 49(4), 28-29.

Whitehead, A. N. (1961). *Reflections on man and nature.* New York: Harper & Browthers, Publishers.

Wilderness therapy aids troubled kids. (1989, March 13). Waterloo Courier.

Wilson, R. (1981). *Inside outward bound.* North Carolina: The East Woods Press.

Yates, E. (1973). *Skeezer: Dog with a mission.* New York: Harvey House.



KEI

Nature as a Guide:

Using Nature In Counseling, Therapy, and Education

By Linda Lloyd Nebbe

Linda Nebbe's early adult years were filled with animals, gardening, and the environment. While managing a camp and doing some environmental education programing, she became aware of another dimension nature offered beyond enjoyment. When people had certain experiences with nature, more than just learning took place. For many, these experiences were life changing. She began to search for ways to share the joys of nature with others in a variety of ways.

Now, fifteen years later, she shares this knowledge with other educators through this book of practical activities that any teacher, counselor, or helping professional can use. The material in this book is referred to as "nature therapy," but it is more than just a therapy. Nature is an element that is essential in development, health, life, self-concept, mental health and well-being.

Although Linda is an elementary counselor and the focus of many of the activities in this book reflects her work with children, this book is for all people. She has used nature therapy with the elderly, adults, teens, and children. Written primarily for professional counselors, this book may be helpful to people in a variety of fields such as teaching, camp counseling, working with at risk youth, and parenting.

ISBN 0-932796-33-8

Educational Media

BEST COPY AVAILABLE